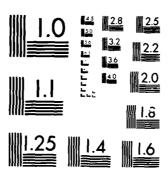
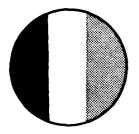
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# 1982 ASSISTANT COMMANDANT/ DEPUTY COMMANDER

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N VISIT TO REFORGER

FOLLOW-UP REPORT

DTIC ELECTE JAN 3 1 1986

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PREPARED BY
AIRLAND BATTLE TRAINING DIVISION
UNIT TRAINING SUPPORT DIRECTORATE

COMMAND AND GENERAL STAFF COLLEGE
FORT LEAVENWORTH, KANSAS 66027

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## DEPARTMENT OF THE ARMY



HEADQUARTERS COMBINED ARMS CENTER AND FORT LEAVENWORTH FORT LEAVENWORTH, KANSAS 66027

ATZL-SWU-E

3 JUL 1983

SUBJECT: Followup Report to Observations Noted During the Assistant

Commandant/Deputy Commander Visit to REFORGER 82

SEE DISTRIBUTION

- 1. Enclosed is the Followup Report to The Assistant Commandant/Deputy Commander (AC/DC) Visit to REFORGER 82.
- 2. This is one in a series of reports published by the Combined Arms Center, reflecting concerns of field commanders and TRADOC observers in regard to TRADOC products. The widest possible dissemination is made in an effort to stimulate thought on current training ad doctrinal issues as well as to keep field units informed.
- 3. TRADOC agencies are requested to review the report for proponent assignments upon receipt. Proponents are additionally requested to notify this headquarters of their point of contact for followup action once their review is complete. The suspense for proponent followup actions is 50 sep 83. While this is a TRADOC After Action Report designed to resolve doctrinal issues by the TRADOC proponents, comments from the field are encouraged but not required.

4. Points of contact at this headquarters are MAJ(P) Cliff Reed or MAJ Mark Spitler, Unit Training Support Directorate, CGSC, AV 552-3839/4317.

FOR THE COMMANDER:

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DISTRIBUTION:

See Inside Back Cover

TIMOTHY J. DECKER J. SFC.
MAJ, GS

**ASST Adjutant General** 

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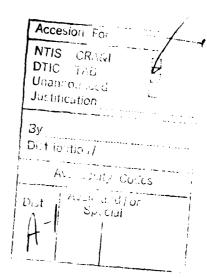
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# The TRADOC Assistant Commandant/Deputy Commander Visit to REFORGER 82

# 11 through 22 September 1982

# Followup Report

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Two	TRADOC Participants in the 1982 AC/DC Visit	4
Three	Status of observations	7
Four	Recapitulation of observations	84
Five	Distribution	86



PART ONE: BACKGROUND, OBJECTIVES, AND CONCEPTS

# 1. REFERENCES

COURSE CONTRACTOR CONTRACTOR

- A. Message, CDR USACAC and Fort Leavenworth, ATZL-DA-DLS, 241430Z Mar 80, subject: Assistant Commandant/Deputy Commander (AC/DC) Visits to USAREUR.
- B. Message, CINCUSAREUR, AEAGC, 161132Z Sep 81, subject: 1982 Assistant Commandant/Deputy Commander (AC/DC) Visit.
- C. Message, CINCUSAREUR, AEAGC-ATC, 231330Z Dec 81, subject: 1982 Assistant Commandant/Deputy Commander (AC/DC) Visit.
- D. Message, CDR USACAC and Fort Leavenworth, ATZL-TDU-E, 161500Z Apr 82, subject: 1982 AC/DC Visit to USAREUR.
- E. Message, CDR USACAC and Fort Leavenworth, ATZL-TDU-E, 281430Z Jun 82, subject: 1982 AC/DC Outbriefing with USAREUR Staff.

# GENERAL BACKGROUND

- A. The 1982 Assistant Commandant/Deputy Commander (AC/DC) visit to USAREUR was the fourth in a series of visits resulting from an agreement between the CINCUSAREUR and the Commander, TRADOC in December 1978.
- B. In March 1980, the Combined Arms Center (CAC) requested USAREUR's comments on a proposal to split the visit into two categories: combat developments and training developments. USAREUR's counterproposal called for alternating visits between REFORGER and more routine training hosted by 7th Army Training Command. CAC agreed with the USAREUR proposal—a training visit was conducted in 1981, and a REFORGER visit was scheduled for 1982.
- C. Sixteen TRADOC service schools and three integrating centers participated in the 1982 AC/DC visit to REFORGER. Those officers and institutions that were represented are listed in part two.
- D. TRADOC representatives participated in virtually all phases of the REFORGER 82 FTX CARBINE FORTRESS. Visits were also made to garrisons to gain additional training insights.
- E. Observations made during the visit were analyzed during a TRADOC workshop in preparation for the formal participant outbrief to the USAREUR Chief of Staff on 21 September 1982. These observations were forwarded to the CAC representative for consolidation. The senior CAC representative informally briefed the CINCUSAREUR regarding the observations noted during the visit on 22 September 1982.

# 3. VISIT OBJECTIVES

- A. The objectives of the AC/DC visitation program are--
  - (1) To improve the TRADOC-USAREUR interface.
- (2) To provide an opportunity to observe Army field operations under conditions approximating combat in NATO Europe.
  - (3) To generate input to ongoing TRADOC efforts.
- B. The primary focus of these visits is the evaluation of TRADOC performance, especially the existence, soundness, and applicability of doctrine. As a corollary, the performance capabilities of graduates of the TRADOC training base are informally evaluated. TRADOC representatives view these visits as an opportunity to evaluate their effectiveness in providing adequate training products. Additionally, the visits provide an excellent opportunity to discuss ongoing TRADOC projects with field commanders as well as solicit valuable input for these projects.

## 4. REPORT ORGANIZATION

- A. This report provides identification, followup, and resolution of TRADOC issues that have surfaced during AC/DC visits.
- (1) Part three contains participant observations noted during the 1982 visit to REFORGER. The term "observation" is selected to permit field concerns to be addressed informally. As used in this report, the word "observation" does not necessarily represent command positions, but provided a sensing of field perceptions.
- B. This report is edited to eliminate redundancy, amplify observations, and establish proponency for actions that fall within a TRADOC area of responsibility.

## 5. PROGRAM MANAGEMENT

- A. The Combined Arms Center publishes a report following each visit. These reports update unresolved issues from previous reports as well as assign proponency for new issues. A followup report is published approximately 6 months after each visit to allow for a continuous update until identified issues are resolved.
- B. Each observation is assigned a proponent for action. Proponents are required to provide the followup status on each issue until it is resolved. Followup actions are provided to CAC 60 days prior to publication of subsequent semiannual reports. Issues are resolved when no further action is required. Unresolved issues are so indicated and listed in part four.

# PART TWO: 1982 AC/DC VISIT TO REFORGER

The following TRADOC Representatives participated in the 1982 AC/DC visit:

USA Combined Arms Center	BG John L. Ballantyne COL John F. Moran MAJ(P) Cliff W. Reed CPT(P) Mark G. Spitler	DCMDR, CATRADA Asst DCMDT, CGSC Ex Mgmt Div, UTSD Program Manager
USA Logistics Center	COL William F. Wollenberg	Dir, Force Dev
USA Soldier Support Center	COL Ted V. Cooper	DCDR for Doctrine
USA Infantry School	BG Kenneth C. Leuer LTC Allen R. Wissinger	Asst Cmdt Dir, Trng Dev
USA Armor School	BG James L. Dozier MAJ Gary J. Marlar	Asst Cmdt Ch, Doc Dev, Cmd & Staff Dept
USA Field Artillery School	BG Donald E. Eckelbarger LTC(P) Phillip Kitchings	Asst Cmdt Dir, Trng Dev

USA Air Defense School	BG Stanislaus Hoey COL Grady W. Barr	Asst Cmdt Dir, Instr Sys Dev
USA Engineer School	COL Alvin G. Rowe	Deputy Cmdt
USA Signal School	COL(P) Leo M. Childs	Deputy Cmdt
USA Military Police School	LTC Donald King	Dir, Trng Dev
USA Chemical School	COL Joseph V. DiGiacinto	Dir, Trng Dev
USA Aviation School	BG Charles L. Teeter COL Joseph F. Rutkowski	Asst Cmdt Dir, Trng and Doc
USA Intelligence School	COL Charles Eichelberger	Asst Cmdt
USA Institute for Military Assistance	COL Donald L. Pemberton	Asst Cindt

USA Ordnance Center and School	COL Golden Thomas GS-14 Cloyd A. Senn	Asst Cmdt Dir, Trng Dev
USA Missile and Munitions Center and School	COL William T. King	Dir, Trng & Doc
USA Quartermaster School	COL Robert B. Rhynsburger	Dir, Trng Dev
USA Transportation School	COL John E. St John MAJ Terry K. H. Wong	Dir, Trng Dev XO to the AC
USA Academy of Health Sciences	COL James G. VanStraten COL Raymond Leahey	Asst Cmdt Dir, Trng Dev

# PART THREE: STATUS OF OBSERVATIONS

The following agencies noted observations during the 1982 AC/DC visit to REFORGER:

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USA Combined Arms Center	8
USA Logistics Center	15
USA Soldier Support Center	18
USA Academy of Health Sciences	25
USA Air Defense School	30
USA Armor School	34
USA Aviation School	38
USA Chemical School	44
USA Engineer School	45
USA Field Artillery School	49
USA Infantry School	55
USA Intelligence School	60
USA Military Police School	63
USA Ordnance School	65
USA Quartermaster School	69
USA Signal School	73
USA Transportation School	82

The FTX CARBINE FORTRESS did not effectively portray the aspects of the attack of the follow-on echelon contained in Airland Battle doctrine.

a. <u>Discussion</u>. CARBINE FORTRESS was an excellent field training exercise that employed the largest troop list ever in a peacetime environment. This size permitted the participants to learn a great deal about employing forces to fight the frontline battle in the European theater. However, the scenario for this did not portray any of the threat's follow-on echelons; this fact degraded the training that could have been provided in accordance with AirLand Battle doctrine. When the entire threat is portrayed, the Commander and staff are confronted with the hard decisions on fighting the frontline battle concurrently with the attack of the follow-on echelons. Without the deep threat portrayal, the staff processes are allowed to function much more smoothly than would otherwise occur. Additionally, J-SEAD and SEAD planning was not critical because of a lack of threat.

The portrayal of a realistic scenario is a worldwide difficulty. Much progress has been made in CONUS by incorporating TRADOC assets into exercise planning to include selection of exercise objectives and scenario development.

The incorporation of TCATA's Tactical Simulator (TACSIM) Computer would allow the portrayal of notional follow-on echelon threats so that simultaneous CPXs and FTXs could be employed to maximize training benefits. The scenario could have been developed to cause a portion of the Orange forces to be employed as tollow-on echelons, thus presenting real challenges in both intelligence collection and employment of maneuver forces.

This is a repeat observation from the 1981 AC/DC Report, Observation  $\mathfrak{sl-4}$ .

- b. Recommendation. That TRADOC increase involvement in the USAREUR series of exercises.
  - c. Proponent for action. CGSC.
- d. <u>Followup status</u>. Action was taken to inject TCATA's TACSIM computer into the USAREUR series of exercises beginning with WINTEX 83. However, other priority projects precluded that participation. The scenarios that were developed did portray the deep threat so that the AirLand Battle doctrine could be applied.

The expansion of REDCOM's assistance to the other unified commands in the selection of training objectives and in evaluation is being used as a vehicle to expand TRADOC participation in the JTX program. CGSC continues to augment the REDCOM exercise program and their assistance teams sent to the other unified commands. The Unit Training Support Directorate, CGSC, manages this program for all of TRADOC.

8

# OBSERVATION: 82-2

## SOURCE: CAC

USAREUR is experiencing many force structure and TOE management problems associated with force modernization.

- a. <u>Discussion</u>. Commanders and key staff principals at all levels expressed concern in this area. The instability and inappropriateness of current and interim MTOEs are causing units to be inadequately supported in many areas. In other cases, units are unable to submit timely requisitions for special equipment and trained personnel. Unless TOE or MTOE management is changed, these problems affecting combat readiness will persist.
- b. Recommendation. That TRADOC, DA, and major commands jointly review current procedures and recommend appropriate management changes. CAC should initiate this action.
  - c. Proponent for action. CACDA.
- d. Followup status. On 17 January 1983, this issue was sent to HQ, TRADOC, for any corrective actions deemed necessary.

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# OBSERVATION: 82-3 SOURCE: CAC

Current structure in USAREUR is inadequate to meet current and projected needs for training device support. Other major commanders also already have, or will have, the same problem.

- a. <u>Discussion</u>. Training device systems such as MILES and DETRAS require intensive and continuing area support. This support includes a full range of maintenance and logistic support as well as initial and recurring training on how to effectively use these systems. Projected new systems such as conduct of fire trainers, MACE, and ARTBASS will compound prevailing difficulties unless the support structure is improved.
- b. Recommendation. That TRADOC (ATSC) review the Army's entire training support structure to identify and program required resources for managing and supporting training devices.
  - c. Proponent for action. TRADOC.
- d. Followup status. ATSC has not attempted to analyze the entire training support structure for managing and supporting training devices but has instead deferred to DARCOM. DARCOM along with DCSLOG has developed contractor logistic support (CLS) concepts dealing with supportability of current and developing training devices, AR 700-XX. This regulation is designed to provide implementing policies on CLS of training devices and incorporates a recently formed task group's comments and recommended policy statements.

#### SOURCE: CGSC

# OBSERVATION: 82-4

A lack of understanding and of the integration of airspace control measures existed throughout the corps tactical area.

- a. <u>Discussion</u>. In the corps and division airspace management elements (CAME and DAME), airspace control measures as dictated by Allied Air Forces Central Europe (AAFCE) are not sufficiently understood. This resulted in the uncoordinated use of field artillery, Army aviation, air defense artillery and US Air Force assets. Specifically, deconfliction altitudes between helicopters and close air support aircraft were not known. Field artillery did not plot low level transient routes (LLTRs), etc. Changes in the air space control order were often received late.
- b. Recommendation. That CGSC review current joint doctrine regarding airspace control and management.
  - c. Proponent for action. CGSC.
- d. Followup status. It appears the lack of understanding and integration of airspace control measures may have been peculiar to the situation observed and not widespread throughout USAREUR. Observations by Colonel Paris , Department of Command (DCOM), CGSC, during his 10 through 26 September 82 visit to REFORGER indicated that all corps were familiar with and employing proper airspace management procedures. Joint doctrine for airspace control management is being addressed during revisions of FM 100-26, the Air-Ground Operations System; FM 100-28, Doctrine and Procedures for Airspace Control in the Combat Zone; and FM 100-42, US Army/US Air Force Airspace Management in an Area of Operations.

# OBSERVATION: 82-5 SOURCE: CGSC

Low-level transient routes (LLTRs) did not meet Army tactical requirements. Specifically, senior commanders found these routes to be cumbersome and uncoordinated.

- a. <u>Discussion</u>. Field commanders expressed concern regarding the designation of LLTRs within the corps area. Specifically, the LLTRs were not coordinated with the corps staff, and changes were cumbersome. Once an LLTR is established, current doctrine precludes close air support (CAS) sorties from operating in an LLTR.
- b. Recommendation. That CAC review current joint doctrine regarding LLTR procedures.
  - c. Proponent for action. CGSC.
- d. Followup status. The review of joint doctrine regarding LLTR procedures must be accomplished in a joint forum with the Air Force. Joint doctrine for airspace control management is being addressed during revision of FM 100-26, the Air-Ground Operations System; FM 100-28, Doctrine and Procedures for Airspace Control in the Combat Zone; and FM 100-42, US Army/US Air Force Airspace Management in an Area of Operation. Joint doctrine regarding LLTR procedures will be reviewed during these revisions.

# SOURCE: CGSC

# OBSERVATION: 82-6

The rear area protection (RAP) concept currently used by 3d Inf Div should be closely monitored for possible Army-wide doctrinal application.

- a. <u>Discussion</u>. The 3d Inf Div DISCOM was assigned the RAP mission for REFORGER 82 and experienced significant success during the first phase of the field exercise.
- b. Recommendation. That CAC coordinate closely with 3d Inf Div to insure that all of the successes are documented.
  - c. Proponent for action. CGSC.
- d. Followup status. The 3d Inf Div concept for RAP was examined and not found suitable for Army wide application. Though the concept proved to be effective for the 3d Inf Div during REFORGER 82, it is viewed purely as an option available to the division Commander. TRADOC PAM 525-30, US Army Concept for Rear Area Protection, dated 31 May 83, reflects the current position regarding RAP.

# SOURCE: CGSC

OBSERVATION: 82-7

The use of off-the-shelf computers and word-processing and television equipment has significantly increased throughout the tactical area. This use, together with the fielding of the Tactical Computer Terminal/Tactical Computer System (TCT/TCS) Maneuver Control System, has identified a requirement for a tactical graphics system.

- a. <u>Discussion</u>. With the total integration of the next generation of command and control equipment, the need for a revised tactical graphic system is obvious. Decision graphics are currently being used and should be formalized in FM 101-5-1, Operational Terms and Graphics.
- b. Recommendation. That CAC review FM 101-5-1 to insure that it contains sufficient Army standard decision graphics for future field use.
  - c. Proponent for action. CGSC.
- d. Followup status. A chapter on decision graphics was developed for RB 101-99(T), Staff Officers Handbook (a CGSC publication), and has been circulated to the field for comment. This chapter on decision graphics, as changed by comments from the field, will be included in FM 101-5-1.

# OBSERVATION: 82-8

## SOURCE: USALOGC

Apparently, no doctrinal organization designed for CSS of the committed DIVARTY of a reserve division exists.

- a. <u>Discussion</u>. During the exercise play, an "uncommitted" DIVARTY was placed out of sector to support an adjacent unit. The parent DISCOM organized a 27-man forward area support team (FAST) to accommodate this deployment.
- b. Recommendation. That doctrine and organizational design include specific support requirements, given that the DIVARTY of "uncommitted" divisions would normally be expected to support other committed units. This should include support from one of the parent division's ammunition transfer points (ATPs).
  - c. Proponent for action. USALOGC.
- d. Followup status. Ammunition resupply is normally provided on an area support basis. Coordination between the supporting DIVARTY and the supported DAO should resolve any ammunition support issue. FM 9-6, Ammunition Service in the Theater of Operations, is now being revised to insure it adequately addresses this issue.

# OBSERVATION: 82-9 SOURCE: USALOGC

Doctrine does not provide for ammunition transfer point (ATP) support for the ACR and separate brigades.

- a. <u>Discussion</u>. ACR and separate brigades rely on ammunition supply points (ASPs) for Class V support and undoubtedly could obtain limited support from divisional ATPs. A more responsive system appears to be available.
- b. Recommendation. That the doctrine and organizational (TOE) developers consider the inclusion of ATPs in ACR support squadron TOEs and separate brigade TOEs. Given force structure constraints, augmentation ATPs should be viewed as an alternative.
  - c. Proponent for action. CACDA.
- d. Followup status. There is an ATP in the Support Squadron of the ACR (J series TOE). Coupled with the Class V supply section of the HHT in the Support Squadron, the ability to set up and run an ATP is valid for the ACR. Separate brigade structure is under design and the ATP will be appropriately considered.

OBSERVATION: 82-10

"Extraordinary" logistics and maintenance support were provided for the Ml tank. This support was due, in part, to the lack of maturity of the support structure because the newness of the system in the command. From all indications, the support was effective.

- a. Discussion. The focal point for MI tank support was the response support element (RSE) of the 3d Inf Div DMMC. This RSE consisted of 10 personnel with representatives from DMMC, CMMC, materiel fielding team (Vilseck), etc. The RSE has direct contact with expediters at all levels/agencies involved in MI maintenance support; e.g., New Cumberland Depot, Dover AFB, Rhein Main/Ramstein General Supply Support Base; CMMC, DARCOM representatives, etc. Prior to the start of the exercise, efforts were undertaken to establish PLL and ASL stockage. Support in the field included the establishment of a DS/GS/tech rep maintenance team that performed much of the required maintenance above organizational level. Organizational level personnel were provided direct access to the RSE by telephone if necessary. Although costly in terms of personnel devoted to this effort, that cost or something approximating it, may be worthwhile. The concept has application to other systems being fielded under force modernization. CSS support of Class III and V was not as readily apparent.
- b. Recommendation. That consideration be given to the establishment of such a support structure for the fielding of selected systems under force modernization. Although personnel intensive, it may prove to be efficient if applied to many systems at one time.
  - c. Proponent for action. USALOGC.
- d. Followup status. Although the practice of drawing personnel from various activities to provided "extraordinary" support to the fielding of a new system has supported the fielding process very effectively, the mission accomplishment of the activities from which the personnel are drawn must suffer as a result. Any action along these lines should be carried out through the normal force structuring process in order to preclude the adverse effects outlined above. Receiving commands should not be encouraged to creat task forces "out of their hide."

## SOURCE: USASSC

Current doctrine prescribes tasks to be performed by the battalion personnel and administration center (PAC) under the supervision of the battalion Sl. However, current doctrine does not prescribe a structure for the PACs. It only lists the number of personnel to be employed in the PAC to perform a myriad of functions.

- a. <u>Discussion</u>. The perception is that in many instances the personnel authorized in a PAC are merged with other battalion Sl personnel assets and perform functions other than PAC functions; this detracts from the mission effectiveness of the Battalion PAC. There is a "battalion PAC II" concept being developed at the SSC at this time.
- b. Recommendation. That the SSC develop the "PAC II" concept and that subsequent doctrine prescribe a structure for that PAC II organization.
  - c. Proponent for action. USASSC.

OBSERVATION: 82-11

d. Followup status. Existing publications contain sufficient PAC structure guidance for current operations. DA Pamphlet 1-2, Personnel Adminstration Center (PAC): Guide for Administrative Procedures, describes all positions in the PAC and lists associated responsibilities and duties. DA Pamphlet 600-8, Military Personnel Management and Administrative Procedures, contains additional guidance, though it is more general in nature. TC 12-3-1 (Test) contains a staffing guide by grady and MOS for a PAC; specific descriptions of functions are included in the text. TOEs include a PAC where it is authorized. For example, TOE 7-046H lists PAC authorizations among other battalion staff authorizations in paragraph 03. TOE 7-246J lists the same authorizations separately in paragraph 02. Organizational Development Bulletin 12-77 contains PAC developmental guidance for use by MACOMs who want to create PACs under their own authority in organizations where PAC are not included in the base TOE. The Battalion Personnel Operations Center concept (formerly PAC II) will address this issue in the long term as part of the High Technology Personnel System.

# OBSERVATION: 82-12 SOURCE: USASSC

The new finance doctrine (FM 14-6, Comptroller/Finance Services in Theaters of Operations, and FM 14-7, Finance Operations) should be reviewed to insure that a void in document flow does not exist between the personnel community and the finance community.

- a. <u>Discussion</u>. Since finance support is on an area basis, and personnel support is both dedicated with AG companies and on an area basis with P&A battalions, we must insure that doctrine provides the proper linkup of documents affecting pay.
- b. Recommendation. That the USASSC perform a review of FM 14-6 and FM 14-7 to insure that there is no void.
  - c. Proponent for action. USASSC.
- d. Followup status. The USASSC has reviewed FM 14-6 and FM 14-7. No doctrinal void exists between personnel and finance doctrine. The finance document flow depicted in FM 14-7 is necessary because personal finance records will not be maintained by finance offices during hostilities. This flow insures efficient processing of documents providing input to the finance system.

The management and use of the enlisted personnel who are trained and awarded an ASI needs to be improved. We need to insure that ASI holders are identified, and that the personnel management system does identify the space requirement and track a face with the correct ASI to the correct space for ASI utilization.

- a. <u>Discussion</u>. This matter has been recognized as a problem for some time. New systems, new equipment, and high technology in support of Division 86 and the AirLand Battle are driving the need for many ASIs. We train personnel and award them ASIs, and we can requisition personnel by ASI. However, the personnel system is not documenting all personnel records for identification purposes and is not identifying ASI-trained personnel arriving in country with the space requirements for which they were requisitioned.
- b. Recommendation. That the SSC, as the proponent for personnel management, review the personnel system and make recommendations as to how management by ASI can be improved and strengthened.
  - c. Proponent for action. USASSC.
- d. <u>Followup status</u>. The Soldier Support Center-National Capitol Region (SSC-NCR) study that led to tightening the criteria for establishing and retaining ASIs in the inventory and MILPERCEN'S ASI offensive continues to improve Army-wide management. The new criteria were instrumental in eliminating 37 ASIs; however, the introduction of new equipment and systems finds 152 ASIs through Change 19, effective March 1983.

The ASI offensive covers the following areas of interest and concern, the agency responsible is also indicated:

- o Addition of ASI requirement to Unit Status Report (USR)--DCSPER.
- o Incomplete documentation of ASI requirments--DCSPER.
- o Requisitioning for ASI requirements--DCSPER.
- o Regulatory ASI utilization policy--DCSPER.
- o Determination of ASI tour utilization--SSC-NCR.
- o ASI inventory objective--DCSPER.
- o Display of selected reports 5 character MOS and 2 character ASI as consecutive data elements--MILPERCEN.
- o Timely and accurate awarding of ASI--MILPERCEN.
- o Command/unit identification and assignment of ASI personnel--DCSPER.
- o MOS in lieu of ASI--SSC-NCR (continuing process).
- o Centralized deletion of ASI--MILPERCEN.
- o Recording of six historical ASI on SIDPERS reports--MILPERCEN.
- o Addition of ASI to all personnel forms and orders--MILPERCEN.
- o SIDPERS automated requisitioning feature--MILPERCEN.
- o Effective ASI management is essential to force modernization--DCSPER.
- o ASI proponent--DCSPER.

The delicate ASI system relies heavily on decentralized and sequential execution. As the manpower, personnel and training systems operate within the Army collectively, they set up supply - demand conditions. In order for the ASI system to be effective, all players need to do their part.

(1) To support both the demand and supply sides; SSC-NCR is charged with the maintenance of the ASI structure through AR 611-1, Military Occupational Classfication Structure Development and Implementation, and AR 611-201, Enlisted Career Management Field and Military Occupational Specialties, and providing for additions, deletions or changes to the structure in a timely and accurate manner.

#### (2) On the demand side-

- o Combat developers need to identify ASIs in TOEs.
- o Force developers need to enter the ASIs into their TAADS.
- o Military personnel officers need to insure that ASI authorizations from the TAADS are reflected in requisitions. The result of any one of these players to fail to do their part is that a demand for an ASI trained soldier is not placed on the personnel community, the training community, or both.

# (3) On the supply side-

- o The schools must do what is necessary to insure that an ASI is entered on the EMF for soldiers trained in an ASI while on TDY-en-route.

  o In the case of TDY and return to home station, the home station MILPO must take the steps to insure that the ASI is entered on the EMF.
- o The local commander has similar responsibilities when his soldiers undergo OJT or new equipment training (NET) to qualify for the ASI.

  o MILPERCEN must match requisitions against inventory and
- select a qualified soldier for assignment or training and assignment.
- o The intermediate replacement organizations and higher level command must then be alert to ASI requirements and identify ASI-qualified personnel and be sure that they are assigned a slot to where the ASI requirement exists, not diverted to basic three-character MOS slot or other duties. If any of these players fail to do their part, the "System will not be able to recognize and assign trained soldiers".

ASI systemic problems have been fully surfaced by the Army's personnel/position communities and maximum extensive efforts are being made to insure that the ASI system is viable. Accordingly, SSC-NCR is continuing its efforts regarding the ASI system and is investigating additional approaches to proper position documentation and personnel identification.

# OBSERVATION: 82-14 SOURCE: USASSC

The TOE of a divisional AG company does not provide for any communication equipment. This was viewed as a serious impairment to mission effectiveness at a fixed site and a more serious problem in unit deployment (convoys) or relocation. Division AG companies (minus 1ID (F)) operated with borrowed radios.

- a. <u>Discussion</u>. This problem was illustrated by the divisional AG of the 1st Inf Div, Fort Riley. The AG company arrived in country and drew its POMCUS. The company could not enter a convoy to move to its field site because there was no radio equipment for the lead or the rear vehicle. Therefore, the company had to intersperse with other units to move the commander had no control mechanism while in convoy.
- b. Recommendation. That the USASSC review the TOE of divisional AG companies to ascertain what, if any, are the justifiable requirements for AG company communications.
  - c. Proponent for action. USASSC.
- d. <u>Followup status</u>. Soldier Support Center has added two FM radios in the J-edition TOEs for divisional and separate brigade AG companies. A recent worldwide study effort regarding critical communications shortfalls recognized the current AG company need, but determined it was not sufficiently critical to warrant interim action.

Some personnel supervising battalion PACs have little or no experience in personnel administration and had only minimal training in that field.

- a. <u>Discussion</u>. The driving force behind this observation is the Army's reclassification process. For example, when an E6 or E7 becomes physically unqualified for retention in a combat arms or combat support MOS, he is reclassified into a CSS MOS. Because of the soldier's grade, he becomes the supervisor of an organization about which he is totally inexperienced. (This observation is only a symptom of the entire reclassification problem.)
- b. Recommendation. That the SSC review the total reclassification process and its impact on the mission effectiveness of the CSS operations and make appropriate recommendations.
  - c. Proponent for action. USASSC.
- d. Followup status. A review of the reclassification process for MOS 75Z (personnel sergeant) did not reveal any specific problems associated with this MOS. Those individuals who are reclassified into a 75-series MOS are those who have prior experience in adminstration or show potential for the MOS; i.e., EERs, aptitude scores, etc. In addition, the soldier reclassified into a 75 MOS must receive mandatory formal training prior to being awarded the MOS.

Since all 75-series MOSs are overstrength at the E6 level and the 75Z MOS is understrength at the E7 level, the E6 from one of these overstrength MOS could be assigned as the PAC supervisor. The specific assignment is made by the local MILPO and is not a pinpoint assignment made by MILPERCEN.

A 7-week course for MOS 75B, skill level (SL) 3, has been developed by USASSC. It is expected to be available in the first quarter of FY 84. Skill Level 3 courses are being developed for 75C, 75E, and 75F and are projected to begin in FY 85.

The total reclassification process is being reviewed by DCSPER, and a reclassification decision module is being designed. This module will process all types of reclassifications. As part of this module, a decision logic tree was developed for automation and was designed to optimize the match of soldier qualifications with Army needs. The intent of this process is to enable the personnel community to provide the training community with projected training requirements based on soldier capabilities and Army requirements. A series of IPRs will be hosted by DCSPER prior to finalization of the project.

The following recommendations are made:

(1) The local MILPO should assign only those personnel as PAC supervisors who are trained to perform the duties. The ideal situation would be the assignment of the reclassified E6/E7 for at least 1 year in a

MILPO prior to assignment as a PAC supervisor. An additional requirement could be attendance at the 75B course, SL3, prior to attendance at the PSNCO Course.

(2) The reclassification decision module should be implemented and evaluated prior to proposing any actual changes to the reclassification process.

## SOURCE: AHS

OBSERVATION: 82-16

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Additional training needs to be provided to medical soldiers in the grades of E5 and E6 regarding the contents and use of unit-level medical sets, kits, and outfits.

a. <u>Discussion</u>. Medical commanders at all levels expressed their belief that medical soldiers in grades E5 and E6 had little knowledge of the contents and use of the medical sets, kits, and outfits included in the TOEs of unit- and division-level medical units. They also felt that medical soldiers had to be cross trained to enable cross utilization in emergency situations.

# b. Recommendations:

- (1) That all medical soldiers attending BNCOC and ANCOC receive an in-depth orientation to medical sets, kits and outfits.
- (2) That AHS examine the problem of cross training with a view toward making training support materials available to unit commanders.
  - c. Proponent for action. AHS.
- d. <u>Followup status</u>. Medical NCOs will receive training in identification resupply, and use of medical sets, kits, and outfits as a major objective in the new 91B2 and 91B3 course. Objectives have been identified for inclusion in the AMEDD BNCOC and ANCOC programs.

# OBSERVATION: 82-17 SOURCE: AHS

The doctrine that has been evolving for the initial supply and the resupply of whole blood to an active theater of operations needs to be developed and published. An ARTEP for the mobile blood detachment also needs to be developed.

a. <u>Discussion</u>. Although considerable thought and effort have gone into the development of operational concepts for providing whole blood to an active theater, these concepts have not been incorporated into a doctrinal statement. Additionally, although there is a mobile blood detachment in the US Army, Europe, force structure, and although the unit was exercised during REFORGER, an ARTEP does not exist for this unit.

#### b. Recommendations:

- (1) That AHS prepare, staff, and publish a doctrinal statement in the area of the initial supply and the resupply of whole blood to an active theater of operations.
- (2) That AHS develop an ARTEP for the mobile blood detachment after the above described doctrine has been published.

#### c. Proponent for action. AHS.

d. Followup status. Whole blood supply operations are evolving as the availability and use of blood substitutes are developed in the research command. Processing equipment and laboratory sets are in the final standardization phase of development as part of a tri-service effort.

Current literature pertaining to the use of substitutes and the preferred method of delivery is adequate until such time as final decisions are made by the Medical Technical Committee of the Office of the Surgeon General.

Instruction in the Medical Service Corps Officer Basic Course and the Medical Service Corps Officer Advanced Course needs to be increased in the areas of vehicle maintenance and medical supply management for TOE units and in the contents and employment of medical sets, kits, and outfits designed for unit and division level medical support.

a. <u>Discussion</u>: Commanders and staff officers at all levels expressed strong opinions that instructions in the subjects outlined above are currently inadequate. Company grade officers assigned to TOE medical units for the first time are believed to be inadequately prepared in these areas.

#### b. Recommendations.

- (1) That the AHS accomplish job and task analyses of unit and division level medical support in the areas of vehicular maintenance and medical supply management and the employment of medical sets, kits, and outfits in order to determine current training shortfalls.
- (2) That the AHS revise appropriate courses of instruction based on the results of these analyses.
  - c. Proponent for action. AHS.
- d. Followup status. Four hours of instruction has been added to the officer basic course for a total of 8 hours with specific objectives targeted at systems maintenance. This includes hands-on checks and records management. The programs will receive continual review and update as required.

A lack of understanding and/or appreciation exists concerning the tactical ramifications of draft doctrine that places heavy reliance on self-aid/buddy aid and "push" rather than "pull" evacuation to improve survival on the modern battlefield of AirLand Battle.

a. Discussion. A TRADOC concept paper is currently in the field for staffing outlining medical operations in a chemical/high intensity environment. The concept places heavy reliance on unit evacuation and self aid/buddy aid for unit survival, while recognizing that organic medical resources will be insufficient to meet the needs of casualties. There appears to be little recognition or acceptance of the notion that unit commanders will, in all likelihood, have to make a conscious decision whether to continue the mission or temporarily stop to allow noncasualties to render buddy aid to casualties caused by a chemical attack.

# b. Recommendations.

- (1) That doctrine in this area be established as expeditiously as possible.
- (2) That this subject be given major attention in all pre-command and officer development type courses throughout the Army on publication of the doctrine.
  - c. Proponent for action. AHS.
- d. Followup status. TRADOC Pamphlet 525-22, <u>US Army Operational Concept for Medical Support Operations in a Chemical Environment</u>, was published 31 January 1983. Tasks supporting this concept have been incorporated in the soldiers manual for common tasks, common modules for ARTEPs, and will be discussed in detail in future "how to" manuals.

# SOURCE: AHS

## OBSERVATION: 82-20

Medical support of rear area security operations is based on a concept of on-call support with heavy emphasis on self-aid.

- a. <u>Discussion</u>. The military police are implementing rear security operations through a concept of area control, preplanned artillery, and fighting positions that use roving motorized patrols. Current and emerging doctrine provides medical support on an as needed basis with limited, dedicated assets. Communication with the motorized patrols and the dispatch of evacuation assets require reliable communications. However, time and distance factors make it imperative that military police units be well trained in self-aid/buddy aid.
- b. Recommendation. That AHS respond to the needs of the military police units to insure adequate medical training packages are available to support unit training requirements.
  - c. Proponent for action. AHS.
- d. Followup status. Self-aid/buddy aid skill training will be expanded during basic combat training. The revised FM 21-2, Soldiers Manual of Common Tasks (skill level 1), incorporates the expanded training requirements.

Lack of a standard aircraft identification system limits air defense artillery (ADA) effectiveness and complicates identification procedures. The use of IFF (Modes III and IV) during CARBINE FORTRESS was inconsistent by both air- and ground-based air defense.

a. <u>Discussion</u>. There is no standardized NATO IFF equipment. The US units use Mark XII with secure mode. NATO units use Mark X Mode 3 (nonsecure). SHORAD IFF (Mode IV) was used only as an identification aid in NATO, reducing the weapon's forward engagement effectiveness. Several Chaparral and Stinger batteries did not use their IFF and lost the training value that could have been gained.

# b. Recommendations.

- (1) That use of Modes III and IV of IFF be a requirement for future training exercises to maximize training benefits for both air and ground units.
- (2) That efforts continue to standardize IFF equipment and procedures throughout NATO.
  - c. Proponent for action. CACDA, in conjunction with USAADS.
- d. Followup status. Efforts to solve these issues are ongoing. The Combat Surveillance Target Acquisition Laboratory, an ERADCOM agency at Fort Monmouth, NJ, is conducting technical feasibility studies to adapt ADA IFF equipment for NATO standardized operational capability IAW Supplement IB to Allied Communications Publication (ACP) 160. Increased emphasis and training on IFF procedures and doctrine during training exercises are high priority TRADOC action items.

# OBSERVATION: 82-22

# SOURCE: USAADS

Doctrine concerning the employment of the forward alerting acquisition radars (FAAR) system is not understood.

- a. <u>Discussion</u>. In some organizations, positioning of the FAAR system is delegated to the battery commander or platoon leaders with no attempt to integrate the overall battalion (division area) coverage.
- b. Recommendation. That USAADS examine current FAAR employment doctrine, publish standardized procedures if needed, and emphasize these procedures in OBC, OAC and PCC.
  - c. Proponent for action. USAA.S.
- d. Followup status. The current FM's dealing with FAAR employment and the Manual SHORAD Control System (MSCS) (FM 44-6, Operations and Training Forward Area Alerting Radar (FAAR) and Target Alert Data Display Set (TADDS), and FM 44-18, Air Defense Artillery Employment, Stinger) are very explicit regarding responsibility for positioning and integrating the battalion sensors. This responsibility is taught and emphasized during OBC, OAC, and PCC.

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# SOURCE: USAADS

CARBINE FORTRESS units indicated a lack of small arms air defense training and use.

- a. <u>Discussion</u>. Procedures for small arms air defense are published and included as an SQT common task; however, small arms air defense training is not being integrated into field training exercises.
- b. Recommendation. That the Combined Arms Center make small arms air defense an ARTEP task.
  - c. Proponent for action. CGSC.

OBSERVATION: 82-23

d. Followup status. The USAADS is the proponent for all air defense tasks in ARTEPs. The small arms air defense task is incorporated as a common module for ARTEPs and has been since April 1981. The problem lies with implementing this in the field environment; the resolution lies with exercise control, not with training developers.

Passive air defense measures need increased emphasis.

- a. <u>Discussion</u>. The concentration of maneuver units presented lucrative air targets. The obvious shape of the equipment (missile launchers, artillery pieces, and antennas) increase the likelihood of identification. In support units and headquarters elements the continuous use of generators presented infrared (IR) targets. Headquarters and support elements were easy to locate using road-traffic marks.
- b. Recommendation. That the Combined Arms Center make passive air defense measures and deceptive measures ARTEP tasks and that acquisition and use of thermal decoys be pursued.
  - c. Proponent for action. CGSC.
- d. Followup status. Pending resolution. Proponent for followup action is reassigned to USAADS as they are proponent for air defense tasks.

NOTE: This issue is unresolved and should be addressed in future reports.

### SOURCE: USAARMS

#### OBSERVATION: 82-25

DIV 86 TOEs as well as doctrine are inadequate in some areas.

- a. Discussion: In general, Division 86 TOEs and doctrine do not support tactical doctrinal concepts because of CS and CSS inadequacies in
  - o Resupply vehicles
  - o Radios
  - o Utility vehicles
- o The general inability and know how to resupply classes III and  $\boldsymbol{V}$  on a fluid battlefield.
- o Equipment (such as the M3), which will not be received for several years but is included in current J-Series TOEs.
- b. Recommendation: That Division 86 TOEs and/or Division 86 tactical doctrine be synchronized.
  - c. Proponent for action. CACDA.
- d. Followup status. Planning for the transition to Army 86 has been in progress for more than two years. Transition planners have recognized that both the Active Army and the Reserve Components will have a combination of present-day and new high technology equipment. As a result of this need, TRADOC has taken steps to identify high-low technology mixes which stay within equipment fielding and budget constraints and still optimize the effectiveness and supportability of the units concerned. Additionally, as a result of this effort, a procedure will be institutionalized to ensure that high-low mix considerations are handled as each new item is introduced into the Army inventory.

OBSERVATION: 82-26 SOURCE: USAARMC

Recent changes to TM 38-750, The Army Maintenance Management System (TAMMS), that delete DA Form 2408-1, "Equipment Daily Log," and DA Form 2408-14, "Uncorrected Fault Record," are not favorably received by commanders.

#### a. Discussion.

- (1) Deletion of DA Form 2408-1 hampers supervisory efforts by the chain of command that are directed at operators.
- (2) Deletion of DA Form 2408-14 makes supervisory actions by maintenance personnel and the chain of command more difficult. Many units are generating locally produced forms to fill gaps.
- b. Recommendation. That reinstatement of the DA Form 2408-1 and DA Form 2408-14 be considered.
  - c. Proponent for action. USALOGC.
- d. Followup status. The deletion of DA Form 2408-1 and DA Form 2408-14 is predicated on the following statements:
- (1) The deletion of the above forms will not have an adverse impact on maintenance management capability at unit level.
- (2) Critical information previously kept on DA Form 2408-1 and DA Form 2408-14 has been transferred to other TAMMS related forms.
- (a) Information previously maintained on DA Form 2408-1 is now maintained on DA Form 2401, "Organization Control Record for Equipment", DD Form 314, "Preventive Maintenance Schedule and Record", and DD Form 1970, "Motor Equipment Utilization Record".
- (b) Information relating to deferred maintenance (previously maintained on DA Form 2408-14) is now maintained on DA Form 2404, "Equipment Inspection and Maintenance Worksheet".

No critical elements of maintenance management information were omitted.

#### OBSERVATION: 82-27

#### SOURCE: USAARMC

Thermal imaging (TI) capabilities of new equipment are not being fully exploited.

- a. <u>Discussion</u>. As II systems proliterate, new uses continue to be found for both day and night use. In general there are no guidelines/SOPs.
- b. Recommendation. That a special effort be made to collect and disseminate lessons learned reparding use of TI devices.
  - c. Proponent for action. CSAARMC.
- d. Followup status. Student Text 17-199, Mounted Night Operations, provides guidelines in this area. Though published primarily for student use at the Armor School, copies have been exported to units for field use. As Armor proponent FM's are updated, use of TI systems will be included.

Units are not cross training and making provisions for continuous operations (CONOPS). Also, manpower authorizations do not support CONOPS.

- a. <u>Discussion</u>. Our equipment generally has the capability to outlast the crews. Battalion-sized units seem to be organizing to operate for the exercise, with little consideration being given to operating over the long haul. Divisions and brigades have the tendency to overuse the units having new equipment such as the Ml, allowing little time for rest and maintenance.
- b. Recommendation. That units give more consideration to operating on a 24 hour-a-day basis. Also, that consideration be given to "double crewing" selected combat vehicles, or as a minimum, increasing the authorizations for crewmen so that a ratio of 1.2 or 1.5 crews to 1 vehicle exists.
  - c. Proponent for action. CACDA.
- d. Followup status. These issues are being worked by several different schools and centers within TRADOC. The USAAVNS is working the AARPSO; the USAFAS has been tasked to evaluate the ability of the current gun crews to perform operations; CACDA has been tasked by the Commander, TRADOC, to look at the impact of "double gunning" the M-l tank battalion.

OBSERVATION: 82-29

Units visited agreed that new pilots and aviation enlisted personnel were well trained to currently established skill levels. Some suggested that schools should offer additional tactical training to utility track pilots and maintenance training to aviation mechanics.

- a. <u>Discussion</u>. Units would like new utility track aviators and mechanics to be able to do more on assignment, thereby reducing unit individual training requirements.
- b. Recommendation. That USAAVNC review utility track pilot POIs and USATSCH review mechanic POIs to determine the possibility of incorporating additional individual training.
  - c. Proponent for action. USAAVNS and USATSCH.

#### d. Followup status.

(1) <u>USATSCH</u>. As a portion of the proposed Career Management Field (CMF) 67 resturcture, all aviation mechanic POIs are being revised. A salient point of these new POIs is the training of the E3 to be a "doer", not a "helper". As students graduate from these courses, the need for supervised on-the-job training (SOJT) and detailed supervision/ assistance in standard job tasks should decline rapidly.

USATSCH has initiated training in a unit environment for some of our AIT courses (67010 and 6710), but only after the student has mastered the requisite knowledge of the system. Though a portion of the focus can be on training in units, the company is the most appropriate place to learn. This company-type training, however, will be expanded to the rest of the 67-series MOSs in the near future. Teaching mission tactical training to AIT students is not feasible because of the many different types of unit missions.

(2) <u>USAAVNS</u>. Tactical training presented to students in the Officer/ Warrant Officer Rotary Wing Aviator Course (ORWAC/WORWAC) acquaints them with the basics of tactical employment of army aviation in combined arms operations. A change is being made to the current POI to add 25 hours of combat skills academics, now taught only in the aeroscout track, to the utility track. This instruction will include air cavalry operations, attack helicopter company operations, Soviet organization for combat, joint air attack team operations, and additional instruction in aerial adjustment of artillery. Additional training will be accomplished by scheduling/compressing training so academics are included during UH-1 night flight training phase.

Additionally, a special study group was formed in June 1982 to review the ORWAC/WORWAC program with the goal of increasing tactical skills and professional development training. The study group analyzed the current POI, ranked the instruction, and eliminated or compressed training in

subject areas determined to be "less critical" in order to make training time available for more desired subject areas. This group developed a proposed POI that increases:

- (a) Professional development training from 12 to 33 hours with emphasis on training management, maintenance management, and logistics.
- (b) Tactical skills academics from 53 to 121 hours with 53 hours devoted to combined arms fundamentals and 68 hours devoted to aviation in combined arms operations.
- (c) Overall tactical skills academics for the utility and scout track student by 83 and 46 hours, respectively, above that reflected in the current POI.

Tactical skills selected for training in the proposed POI were based on recommendations of field commanders as reflected in the Specialty Code 15, Aviation, Army Occupational Survey conducted by the department of the Army in 1981. DA site selection committee findings were used to determine those critical tasks for training to the introductory/familiarization level during the ORWAC/WORWAC program. Some 236 tasks were selected for inclusion in the proposed POI. Only 87 of these tasks are being taught under the current POI.

The reclassification of NCOs (E6 and above) from combat arms CMFs to CMF 67 (aviation mechanic) and the inappropriate reclassification to less technical CMFs (like 71P, aviation operations) is causing concern.

- a. <u>Discussion</u>. Aviation mechanics accumulate technical experience early in their careers. This knowledge and experience is essential to effective performance as a maintenance supervisor or technical inspector at more senior levels. Without some formal schooling, the reclassification of NCOs to other aviation CMFs causes difficulties for the soldiers and a burden to units.
- b. <u>Recommendation</u>. That the USASSC review the reclassification process to determine the validity of the above observation and to establish corrections if appropriate.
  - c. Proponent for action. USASSC.
- d. Followup status. This observation has been discussed with the Enlisted Aviation Branch, MILPERCEN, and it was determined that they are aware of the problem. They have acted to prevent further incidents wherein unqualified persons are reclassified into CMF 67.

MILPO Message 83-65, USA MILPERCEN, DAPE-EPH-M, 081830Z Dec 82 established a moratorium on further reclassifications into, within, or out of CMF 67 without prior MILPERCEN approval. Prior to this action, in June 1982, MILPERCEN permanently withdrew reclassification authority for reclassification into, within, or out of CMF 67 for all E6 and above personnel.

MILPERCEN authorities are aware that some unqualified or marginally qualified NCOs who are holders of a CMF 67 MOS exist. In this regard, MILPERCEN has stated that they will provide instructions for reclassification and reassignment of such persons if those cases are appropriately documented and action is requested by field commanders.

OBSERVATION: 82-31 SOURCE: USAAVNC

Some aviation unit commanders feel that the contribution of Army aviation to the AirLand Battle could be improved.

- a. <u>Discussion</u>. It appears that Army aviation is not being employed to its fullest capability. More consideration must be given by the ground commander to the contribution that Army aviation can make to the AirLand Battle. Integration of Army aviation into the combined arms team is taking place; however, some commanders must be reminded to consider it early in the planning phase.
- b. Recommendation. That inclusion of Army aviation in tactical schemes of maneuver should be a routine consideration and should be emphasized to the combat arms officers attending PCC.
  - c. Proponent for action. CGSC.
- d. Followup status. Army Aviation is routinely incorporated into the tactics instruction of Phase II of combat arms pre-command courses. Additionally, in Phase IV the role of Army Aviation is stressed during both offense and detense tactical instruction, with particular emphasis on the use of attack helicopters in the AirLand Battle.

## OBSERVATION: 82-32 SOURCE: USAAVNC

The terminology used to assign missions to aviation units is imprecise and varies from unit to unit.

- a. <u>Discussion</u>. The terms "OPCON" and "support" are characteristically used to assign missions to aviation units. These terms mean something different to almost everyone. More precise, standard terminology, which is similar to that used to assign missions to FA units, would simplify the concentration of aviation assets and define responsibilities more clearly. This is especially true of US Army aviation units supporting allied maneuver units.
- b. Recommendation. That the Combined Arms Center review terminology to determine if a more effective method is possible.
  - c. Proponent for action. CGSC.
- d. Followup status. Based on discussions with the doctrine writers at USAARMS and USAAVNC, the term "support" is being stricken from doctrinal manuals as a mission to aviation units. Both the USAARMS and the USAAVNS agree that the only missions for aviation units that will carry a command relationship are "attached" and "OPCON". Aviation unit missions will mirror those of armor and infantry units when the term "support" is removed from doctrinal publications. This will correct the confusion observed among USAREUR units.

SOURCE: USAAVNC

OBSERVATION: 82-33

The organizational location of aviation intermediate maintenance (AVIM) is a concern of aviation commanders.

- a. <u>Discussion</u>. Field aviation commanders expressed the concern that AVIM support may not be sufficiently responsive to their needs in the fluid AirLand Battle environment if this capability is not organic to aviation battalions.
- b. Recommendation. That the USATSCH in coordination with USAAVNC review the organizational placement of AVIM units in light of the emerging AirLand Battle concepts.
  - c. Proponent for action. USATSCH.
- d. Followup status. One highlight of Army 86 was to effectively separate fighters and supporters organizationally. This is not intended or envisioned as a degradation in support to customer units. It is necessary, however, to congeal maintenance and supply functions that are required to support heavy customers rather than piecemeal these functions to owning units. The AVIM units are currently located so as to provide required support, both supply and maintenance, as equitably as possible to all supported units. Inclusion of AVIM in the operating battalion structure would tend to degrade support capabilities as well as create redundant requirements for sophisticated repair equipment, shop sets, and trained personnel.

# OBSERVATION: 82-34 SOURCE: USACMLS

USAREUR requires current doctrine regarding NBC defense operations and chemical weapons employment procedures.

- a. <u>Discussion</u>. As a result of the USACMLS being disestablished between 1973 and 1979, a doctrinal void exists. In most cases, current literature is outdated and does not reflect up-to-date procedures and organization. A continuing shortage of personnel at the USACMLS hampers the school's capability to provide doctrinal literature to the field.
- b. Recommendation. That TRADOC resource the USACMLS to above normal levels in order to allow the school not only to "catch up," but also to develop and publish new, up-to-date field manuals addressing NBC defense and chemical weapons employment.
  - c. Proponent for action. HQ TRADOC, DCSPAL.
- d. Followup status. Appropriate resources have been provided the chemical school for FY 84 to a level of support well above the average. This should enhance the schools capability to provide doctrinal literature to the field.

OBSERVATION: 82-35 SOURCE: USAES

Engineer commanders and their staffs were fully involved in the tactical planning, particularly the obstacle plan, from the top down (the way it should be), rather than from the bottom up.

- a. <u>Discussion</u>. Total involvement of engineers in preparation of the battle plan was observed from the corps down, resulting in more realistic and better control of the terrain. Terrain teams were well utilized. In the past, a tendency has existed for the obstacle plans to be an engineer "thing" that was developed from squad leader up through channels with little involvement with maneuver commanders and operations officers. Divisions were given corps-directed obstacle zones that were then developed with detailed plans to support brigade and task force maneuver with necessary gaps and tie-ins with the terrain.
- b. Recommendation. That TRADOC continue to stress the essentiality of Engineer involvement in the formulation of tactical plans.
  - c. Proponent for action. CGSC.
- d. Followup status. CGSC concurs with this recommendation. The contents of FM's 71-100, Armored and Mechanized Division Operations; FM 100-5, Operations; and FM 100-15, Corps Operations; as well as CGSC tactics instruction, support this concept.

Lack of adequate communications constrained responsiveness of engineer units and their ability to coordinate.

- a. <u>Discussion</u>. Engineer units must be employed throughout the battlefield from the covering force to corps rear. Current TOEs do not provide sufficient communications to effectively control all engineer assets in the corps area. Additionally, the range of current equipment is inadequate for the distances at which most engineer units operate. This is certainly not a new problem, but it is now more severe, considering the importance of engineer units to support the combined arms team and the expanded distances in the AirLand Battle.
- b. Recommendation. That USAES, in conjunction with TRADOC, CAC, and the USASIGS, initiate a new, major thrust to provide engineer units with more effective communications capabilities.
  - c. Proponent for action. USAES.

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- d. Followup status. The USAES is in the process of upgrading engineer communication capabilities. A full-time communications support requirement (COMSR) project officer has been assigned to DCD to establish a link between the USAES and proponent communications agencies. Engineer units are included in the operational and organizational plans (O/P) for new generations of communication systems such as:
- (1) single channel ground airborne radio systems. VHF (SINCGARS-V) IOC 1984.
- (2) <u>Position Location Reporting System/Joint Tactical Information</u>
  Distribution System Hybrid (PJH).
  - (3) NACSTAR/GLOBAL Positioning System (NAVSTAR/GPS). IOC 1988.
  - (4) Objective High Frequency Radio Systems (OHFR). IOC 1990.
  - (5) Mobil subscriber equipment. IOC not yet determined.

Qualitatively, these state-of-the-art systems will meet some of the operational requirements and recommendations suggested in the engineer MAA. Quantitative deficiencies are being corrected through ongoing TOE actions. The USAES is identifying requirements for a Tactical Computer Terminal/Tactical Computer System (TCT/TCS) computer-based equipment designed to facilitate the generation, collection, analysis and distribution of vital engineer information. Engineer staffs (BES, ADE, S3, corps engineer) will use the TCT/TCS to effectively employ battlefield resources.

SOURCE: USAES

OBSERVATION: 82-37

The brigade engineer concept, approved from Division 86, can be used with the current TOE by internally reorganizing the divisional engineer battalion.

a. <u>Discussion</u>. The 10th Engr Bn, 3d Inf Div, has demonstrated that the brigade engineer concept can work even with the current TOE pending authorization of the dedicated brigade engineer sections. This does not mean that the divisional engineer battalion has sufficient authorizations to adequately staff both the battalion headquarters and the maneuver brigade cells for effective control of engineer effort in the area of operations. However, given the importance of having an engineer planning and coordination capability with committed brigades, the 10th Engr Bn has managed to provide this capability by internally reorganizing.

For several years, the 10th Engr Bn has formed brigade engineer cells for two brigades under the Engineer battalion XO and S3. Each organic and supporting company provides a knowledgeable NCO to complete the cell. The engineer for the 3d Bde is provided by the supporting DS engineer battalion. Recently the 10th Engr Bn has gone one step farther. The battalion commander (division engineer) has split out the S2 and S3 sections—the S2 section to the 1st Bde and S3 section (minus) to the 2d Bde. A small cell from the S3 staff, headed by the assistant S3, is located in the division tactical CP; the battalion commander operates out of the tactical CP where he can best assist the division staff and communicate with engineer units. Granted this leaves the battalion staff stripped of operational capability except for administrative and logistic support; however, it works and gets the engineer where he can best support maneuver forces.

- b. Recommendation. That USAES continue to support the brigade engineer concept, stress the importance of early implementation of Division 86, and consider the doctrinal implications of the 10th Engr Bn approach in the interim.
  - c. Proponent for action. USAES.
- d. Followup status. USAES is supporting the brigade engineer concept as reflected in recent TOE changes and study documents (AURS) for both divisional engineer battalions and separate brigade or ACR engineer companies. The following units have a four-man brigade engineer section headed by a major in their TOEs as of 1 October 1982: engineer battalion, heavy division; engineer company, separate infantry brigade; engineer company, separate airborne brigade. TOEs for the engineer companies organic to the ACR and separate light infantry brigade that include the same brigade engineer section are at TRADOC for approval and should be approved and published in April 1983. The AURS for the HTLD, airborne and air assault divisions contain the four-man section.

#### SOURCE: USAES

Command and control of all engineer units working within the Division area failed to be a problem in spite of traditionally expressed concerns.

- a. Discussion. Current doctrine indicates that committed divisions will require considerable engineer support in addition to the organic divisional battalion. It is anticipated that several additional battalions (up to four) may be required, depending on the workload. This will call for an engineer group to be DS to the division for command and control of these DS battalions. The often-raised issue (primarily by RC group commanders) is that if the group commander is the senior engineer in the area, then he should be the division engineer. This concern was expressed early in FTX CARBINE FORTRESS prior to actual employment of the group in a DS-to-division role. Doctrine is that the division engineer will always be the division engineer. Following such employment, the group commander involved indicated that operating under the doctrinal guidance was not a problem.
- b. Recommendation. That USAES continue with command and control doctrine for engineer units supporting divisions as currently stated in FM 5-100, Engineer Combat Operations.
  - c. Proponent for action. USAES.

OBSERVATION: 82-38

d. Followup status. The USAES concurs with the recommendation and is continuing with the command and control doctrine stated in FM 5-100.

## OBSERVATION: 82-39 SOURCE: USAFAS

Concerns continue to be expressed regarding sustainment training in USAREUR subsequent to tactical fire direction system (TACFIRE) fielding and new equipment training (NET).

a. <u>Discussion</u>. The perception exists that as a unit is issued its TACFIRE equipment and completes NET, priority for trained personnel will shift to other units being issued TACFIRE. Because of personnel losses and the necessity for maintenance of the highly perishable TACFIRE skills, a sustainment training capability is required.

USAFAS views TACFIRE sustainment training for USAREUR to be a real need and will continue to work with USAREUR to develop data for a decision on how to proceed. To date, USAFAS has initiated the following actions:

- (1) The TACFIRE Basic Technical Course (BTC) POI was submitted to TRADOC on 22 February 1982.
  - (2) A copy of the POI was sent to the 7th CATC at the same time.
- (3) The TACFIRE Fire Support Course (250-F6) was recognized by Headquarters, TRADOC, as an equivalent course for TACFIRE BTC in June 1982.
- (4) A review is ongoing to determine where the TACFIRE BTC sustainment should be conducted.
- b. Recommendation. That USAFAS continue to work with USAREUR to develop an acceptable approach to TACFIRE sustainment training.
  - c. Proponent for action. USAFAS.
- d. Followup status. The TACFIRE Training, TCADD, continues to work with DCRDT, Headquarters, USAREUR Force Modernization Office (Major Ferezan), the 7th CATC (Major Smith), and the USAREUR New Equipment Training Team (Lieutenant Colonel Scott) to insure that maximum sustainment training is conducted within equipment constraints and field training requirements.

## SOURCE: USAFAS

The shortage of FA captains is necessitating the performance of battalion fire support officer (FSO) duties by lieutenants-duties for which lieutenants are not school trained.

- a. <u>Discussion</u>. FA battalions do not have sufficient captains assigned to fill the battalion FSO position and, of necessity, are assigning lieutenants to fill the void. While lieutenants are not school trained to perform these captain-level duties, they do receive 10 periods of fire support coordination instruction. To improve and reinforce knowledge gained, a 4-day field exercise affords additional opportunities for fire support coordination instruction. However, units observed during REFORGER were aware of the lieutenant level inexperience and have concentrated training efforts to compensate for this lack of experience. This positive approach has done much to forestall a potential problem.
- b. Recommendation. That USAFAS review the possible resolution of the USAREUR captain shortage with MILPERCEN.
  - Proponent for action. USAFAS.

OBSERVATION: 82-40

d. Followup status. The perceived USAREUR captain shortage is not necessarily the case. The USAREUR captain percentage fill is close to its maximum but seems worse because of the major shortage. Currently, captains are occupying these major spaces; this causes many of the captain slots to be filled by lieutenants. The field is encouraged to continue to concentrate training efforts to compensate for the training shortfall. FAPO will continue to monitor this issue.

### OBSERVATION: 82-41

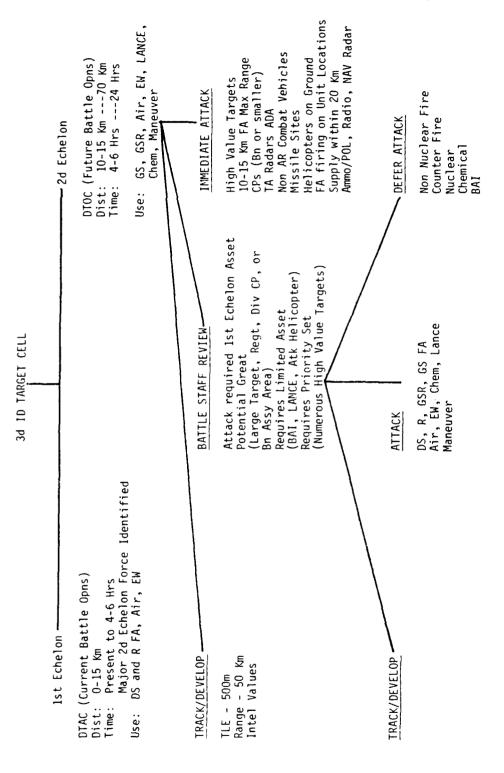
SOURCE: USAFAS

The concept and operation of the VII Corps and 3d Inf Div targeting cells worked well (inclosure 1).

a. <u>Discussion</u>. Implementation of operational concepts for the targeting cells is resulting in access/interface behind the "green door" of the ASIC; this is facilitating early target access and identification. Configuration and use of available computer hardware and software are improving markedly the timeliness and reliability of target analysis and planning.

USAFAS has been working with the Defense Nuclear Agency and TRADOC representatives to determine the best approach for targeting cells. A contract was initiated in June 1983 for a 1-year period.

- b. Recommendation. That the USAFAS review data from the USAREUR test with the contractor.
  - c. Proponent for action. USAFAS.
- d. Followup status. TCADD is preparing a targeting appendix for FM 6-20J.



### OBSERVATION: 82-42

SOURCE: USAFAS

The field artillery section (FAS), corps, is inadequately manned to do its job.

- a. <u>Discussion</u>. USAFAS recognized that the FAS, corps is not adequately manned to perform its training and operational role in the AirLand Battle. The solution contained in the Division 86/Corps 86 transition TOE is long range, but USAFAS will continue to monitor for other opportunities to accelerate resolution of this issue.
- b. Recommendation. That the USAFAS continue to review possible opportunities for early resolution of the issue.
  - c. Proponent for action. USAFAS.
- d. Followup status. An on-order concept for the headquarters and headquarters battery (HHB) corps artillery has been developed together with a proposed basis of issue plan (BOIP) for this battery. When implemented in the Corps 86, the HHB will overcome the inadequacies of the FAS, corps.

OBSERVATION: 82-43 SOURCE: USAFAS

Field artillery brigades were used as the force artillery headquarters and assumed responsibility for counterfire.

- a. <u>Discussion</u>. Instances occured during CARBINE FORTRESS where FA brigades were the force artillery headquarters and assumed responsibility for counterfire. However, present doctrine and force structure assign target acquisition assets to the division artillery, and counterfire is a mission normally associated with the division artillery. As AirLand Battle doctrine continues to mature and Division 86/Corps 86 transition TOEs are implemented with possible corps artille y target acquisition assets, the issue of counterfire will need to be reviewed.
- b. Recommendation. That USAFAS continue to review the role of corps artillery in light of evolving doctrine and force structure changes.
  - c. Proponent for action. USAFAS.
- d. Followup status. TOEs for headquarters and headquarters batteries, FA brigades provide a tactical operations center (TOC) in which to plan and execute counterfires. The FA brigades TOC parallels the TOC organic to a DIVARTY HHB. Under the Division 86/Corps 86 concepts, each level will have its own FA target acquisition resources for use in the targeting effort. If FA brigades are used as force FA headquarters, the appropriate force level will provide them with target acquisition means (FA).

OBSERVATION: 82-44 SOURCE: USAIS

Commanders at platoon, company, and battalion level need to understand the next higher level's overall battle plan/concept of how the battle will be fought. The initial mission is normally executed well in its singular form. However, initiative is hampered due to the lack of knowing the "how" of overall intended outcome.

a. <u>Discussion</u>. Knowledge at each level of the next higher level's total plan will open the opportunities for initiative and impact on the application of combat power at the critical points of decision. This will take place in the absence of orders if each subordinate commander understands the total plan of how the enemy's jugular will be cut.

### b. Recommendations.

- (1) That all institutions emphasize the development and dissemination the of complete battle plan.
- (2) That this area be reflected in the ARTEP and evaluated in all exercises.
  - c. Proponent for action. CGSC.
- d. Followup status. FM 100-5 stresses understanding the commander's "intent". Presently, the method used to disseminate orders does deal with the higher headquarters plan in paragraph 1b of the operation order. However, the commander's intent must be fully addressed in paragraph 3a. If the concept is in sufficient detail, appropriate action in the absence of additional instructions will be insured. If additional emphasis is placed on the planning and issuing tasks already outlined in the ARTEP, then sufficient emphasis will have been placed on these areas.

A structured learning process is required from individual thru division to maximize time and efficiency during all CTXs, JTXs, FTXs, and CPXs.

a. <u>Discussion</u>. Goals were established at CENTAG and corps level. However, goals and training objectives were not found below that level. Learning tasks at each level for each type mission - attack, defend, maintain, communicate, supply, etc-with measurable standards would serve to focus learning for everyone involved.

### b. Recommendation.

That the new FM 25-4, How to Conduct Training Exercises, includes this approach:

	Goals	TTOs	SMs
MACOM	X		
Corps	X		
Division	X	X	
Brigade or Regiment	X	X	
Battalion	X	X	
Company	X	X	X
Platoon	X	X	X
Squad or Section	X	X	X
Individual soldier			Х

Tactical Training Objectives - derived from mission analysis, ARTEP, and directives from higher headquarters.

- c. Proponent for action. DCST, TRADOC.
- d. <u>Followup status</u>. Recommendation was taken under consideration during rewrite of FM 25-4. Basic philosophy exposed by recommendation can be found in chapters 1 and 2 of FM 25-4.

OBSERVATION: 82-46 SOURCE: USAIS

Doctrine to support field tactical operations is inadequate.

- a. <u>Discussion</u>. Unit commanders from division to company level appeared more than satisfied with the adequacy of the doctrine available to them. In some instances, ic was felt that instead of needing additional doctrine, the commanders need to assimilate and practice what is currently written as opposed to receiving additional literature telling them "how to." Most of the commanders did not feel that it was necessary for the school to produce doctrine in a cookbook fashion by covering every expected type of tactical situation. Rather, they felt that doctrine should be keyed to the problemsolving process of learning-investigating, analyzing, and forming principles and concepts and then tying these together to solve the problem at hand. An area of concern was the need for standardized training drills (crew, battle, and situational) that would be applicable to like units throughout the world, e.g., for a mechanized infantry unit: mount/dismount carrier; action right/left; reaction to direct/indirect fire.
- b. Recommendation. That the institutions review their doctrinal manuals to insure that they clearly state the fundamentals, principles, and operational concepts necessary for field tactical operations; that the institutions intensify the application of doctrine through the use of the problemsolving process of learning in the officer basic and advanced courses; and that the development of standardized training drills for like units be completed ASAP.
  - c. Proponent for action. CGSC.
- d. Followup status. The promulgation of standardized drills is supported. This is part of the standardization set down in AR 350-1, Army Training, In accordance with CG TRADOC guidance, doctrine incorporates tactics, techniques, and procedures. Therefore, staff responsibility for drills (previously referred to as training drills) has been transferred to DCSDOC, TRADOC. ATB has been designated executive agent for the drills program (MSG 221500Z Jun 83, from CG TRADOC//ATDO-ZD// to AIG 891, subject: Drills Development). Prototype drills packets were sent to service schools in January 83. Service schools were to identify those drills to be developed by 8 July 83. Army Training Board, in conjunction with integrating centers, will establish priority and schedule for drills development and attempt to resource as part of the Doctrinal Literature Program. The generic term drills replaces the term training drills which previously included battle, crew, and situational drills.

# OBSERVATION: 82-47 SOURCE: USAIS

The value of ground surveillance radar (GSR) should be reevaluated in light of the technology now fielded; i.e., thermal imagery.

- a. <u>Discussion</u>. Considering limited personnel assets, the utility of GSR versus thermal imagery is questionable.
- b. Recommendation. That a review/study be conducted to determine if thermal imagery devices should replace GSRs.
  - c. Proponent for action. USAICS.
- d. Followup status. USAICS' position is that a reevaluation of the value of GSR would be a waste of resources. For the past 2 years, TRADOC's output of personnel in MOS 17K has met 50 percent of field requirements. This difficulty has been resolved, and field commanders should see a marked increase of 17Ks by late FY 83. Also, thermal imagery systems do not have the range of GSR and are severely limited by adverse weather conditions. To eliminate GSRs would severly restrict the commander's ability to see the battlefield. Thermal imagery devices should complement, not replace, GSRs. General Cavazos was briefed on this complementary relationship on 30 July 1982 and was satisfied with it.

OBSERVATION: 82-48 SOURCE: USAIS

Human intelligence (HUMINT) assets are not available to the division commanders.

- a. <u>Discussion</u>. The division commander currently does not have an organic HUMINT capability to help him see the battlefield to a depth of 15 to 30 kilometers in front of the FLOT. One division commander has taken the assets out of his hide (personnel and equipment) to meet this need to acquire information essential to the decisionmaking process at his level.
- b. Recommendation. That CAC closely analyze the organization and structure of the division level HUMINT capability being tested in the 9th Inf Div for applicability throughout the Army.
  - c. Proponent for action. CACDA.
- d. Followup status. The Force Design Directorate of CACDA is compiling information from experience gained by the 9th and 3rd Infantry Divisions, the British, Canadians, and Germans, and a number of other sources to determine the most effective and affordable option to meet the need of the Division Cdr to see into his area of influence. A staff study is presently being circulated among the concerned centers and schools to determine reaction to the initial study conclusions.

#### SOURCE: USAICS

### OBSERVATION: 82-49

Although there have been many improvements made recently in the exchange of compartmented intelligence data during field training exercises, there is still no clear-cut, documented doctrine on this exchange.

- a. <u>Discussion</u>. Several comments from field commanders and operations officers indicated that there is no instruction or documentation, to the level of detail required, that enables them to fully understand and perform these functions in a field training exercise. It is especially difficult when allied organizations are participating.
- b. Recommendation. That USAICS, in conjunction with ACSI, DA, and the National Security Agency (NSA), develop or expand current POIs, to include instruction on and direct application in an FTX environment for the procedures, formats, communications, etc, that will provide for the exchange of "exercise" compartmented intelligence data with both US and allied forces. Procedures for securing the authority for exchange of such data must also be included.

### c. Proponent for action. USAICS.

- d. Followup status. There is currently little instruction given in this area and no doctrine. Several recent documents (MC 101 and CM 212 for Electronic Warfare and USSID 316 for SIGINT) have relaxed some restrictions on the exchange of data. There are currently a number of actions in progress that will attempt to resolve the problems regarding exchange of SIGINT/EW data:
- (1) This subject will be addressed by a USAICS working group as SIGINT/EW FMs are drafted.
- (2) USAICS personnel will discuss this issue in upcoming trips to CAC, FORSCOM, and NSA.
- (3) Fort Devens is putting together a group to study this problem and make recommendations for resolution. A change to the POIs of SIGINT/EW courses that provide instructions regarding existing documents, procedures, and definitive doctrine will be accomplished, but much research and coordination must be done prior to that action.

Although many improvements have been made, the sustainment training of linguists, both CMFs 98 and 96, is still not maintaining the level of proficiency required to meet readiness requirements.

- a. <u>Discussion</u>. Comments from commanders, operations officers and NCOs, language officers, and linguists indicate that tactical units need help in this area. Many linguists, through both personal testimony and language tests, have lost as much as 40 to 60 percent of their language ability. Efforts to improve this training have included the Trojan Program, FLTC-E, Homeward Bound, USAREUR Russian seminars, contract courses in Aachen and Ruesselsheim, and the accelerated courses in Garmisch.
- b. Recommendation. That USAICS develop a "how to" manual that will assist the tactical units in establishing a viable training program; this will enable these units to maintain a level of proficiency commensurate with their CMF requirements. This manual/package should include, as a minimum, standard tests and diagnostic tools that will measure linguistic abilities, illustrate, and if appropriate, prescribe training facilities suitable for both garrison and field training to include recorders, simulators, receivers, etc.
  - c. Proponent for action. USAICS.
- d. Followup status. USAICS is contemplating how best to tackle the development of 96C and 98G "how to" manuals. While these products will be beneficial, there are other actions that would enhance sustainment training for linguists. Among these are the following:
- (1) Require units to report linguist proficiency levels on unit readiness reports.
  - (2) Test a percentage of linguists periodically.
- (3) Have DLI increase the military/technical vocabulary in basic courses.
- (4) Have USAICS influence the assignment of linguists to insure best use.
- (5) Increase participation of linguists in strategic debriefing, and use REDTRAIN funds to send them to operational units.
- (6) Consider competency pay, bonuses, and accelerated promotion for selected, highly competent linguists.

The number and types of automated intelligence systems in USAKEUR are many and varied; i.e.,  $I^2S^2$ , LOCE, CMSS, APPLE II, etc. It would appear the only near term all-source analysis sytem (ASAS) available to USAKEUK will be a combination of capabilities inherent in these automation systems.

- a. <u>Discussion</u>. DA, DCSOPS, under the AEWIC, has approved a QRC program called Microfix that is designed to add a minimum capability to tactical units as soon as possible. This program will provide microprocessors, not to exceed 24 at corps, 12 at divisions, and 4 at each ACR or separate brigade. A management action plan, as well as a user group (all MACOMs) to function as a clearinghouse for software developed by members, will be established. Bimonthly newsletters, as well as semiannual principals meetings and exchange of floppy disks will be used for data dissemination.
- b. Recommendation. That USAICS, in conjunction with FORSCOM, PM-ASAS, DA, DCSOPS (DAMO-RQI), ACSI, and DA (DAMI-AM), establish an organizational and operational concept that will integrate these automation systems into a useable, supportable, and viable intelligence automation capability.
  - c. Proponent for action. USAICS.
- d. Followup status. Forthcoming correspondence from DA will task TRADOC (USAICS)/FORSCOM to develop a microfix organizational and operational concept as part of the Microfix Management Action Plan. It is estimated that this action will be completed in October 1983.

# OBSERVATION: 82-52 SOURCE: USAMPS

Command and control of the rear area protection (RAP) mission is not standardized.

- a. <u>Discussion</u>. Current doctrine indicates that the corps RAP mission will be directed by the COSCOM commander. The latest published interim operational concept for RAP indicates that the G3 is responsible for the execution of RAP. RAP for REFORGER 82 was controlled by the deputy corps commander from the corps rear tactical operations center.
- b. Recommendation. That the USAMPS evaluate the corps rear tactical operations center concept for execution of the RAP mission.
  - c. Proponent for action. USAMPS.
- d. Followup status. The corps rear tactical operations concept was evaluated and included in the present RAP concept that has been briefed and approved by the Commander, TRADOC on 19 April 83. TRADOC PAM 525-30, US Army Concept for Rear Area Protection, dated 31 May 83 provides detailed information.

### SOURCE: USAMPS

### OBSERVATION: 82-53

Subordinate units of corps MP battalions are experiencing difficulty in receiving adequate combat service support.

- a. <u>Discussion</u>. Corps MP battalion subordinate units are widely dispersed throughout the corps area. MP commanders have identified a need for additional combat service support personnel and equipment such as fuel pods and fuel handlers, trucks and truckdrivers, ammunition handlers, and maintenance personnel in their units.
- b. Recommendation. That the USAMPS evaluate the requirement for a support platoon in the corps MP battalion TOE (19-76).
  - c. Proponent for action. USAMPS.
- d. <u>Followup status</u>. Combat service support for the corps MP battalion is presently unresourced. The Director of Combat Developments will study the issue when resources become available.

OBSERVATION: 82-54 SOURCE: USAOC&S

The fix-forward (FF) concept is not understood in detail.

a. <u>Discussion</u>. Units employed varied approaches to fixing forward. The different approaches were based on the perceived or known capabilities of the units involved. The structure of PLL and ASL should be based on the application of FF, particularly as applied to each major weapon system.

- b. Recommendation. That the different application of FF employed during REFORGER 82 be evaluated by the USAOC&S and other applicable schools. That the application of FF within Division 86 be reevaluated, and detailed training programs be developed and used as part of the Division 86 NOTT.
  - c. Proponent for action. USAOC&S.
- d. Followup status. A NOTT package has been developed and will be incorporated in the NOTT visits to USAREUR in the summer of 1983.

There is concern that organizational maintenance and direct support maintenance do not and will not have adequate troubleshooting/diagnostic capabilities to support the new weapon systems being fielded (Ml tank, M2 and M3 fighting vehicles).

a. <u>Discussion</u>. The capability of maintenance units to quickly and accurately identify system faults is becoming more significant with the increasing costs of repair parts. The complexity and sophistication of the new weapon systems have caused concern as to whether current maintenance capabilities can provide the needed troubleshooting or not.

#### b. Recommendations.

- (1) That the USAOC&S continue its effort to upgrade troubleshooting training at all levels (AIT, PTC, BTC, ANCOC & WO). (Starting last year the USAOC&S increased the amount of TS training given AIT students by up to 15 percent of the POI. Eight PTC courses-45E2O, 63E2O, 63B2O, 63S2O, 63Y2O, 63J2O, 63T2O, and 45T2O-are under development for implementation during FY 83 and FY 84. These PTC courses will concentrate on troubleshooting training. The USAOC&S is also working on a program to increase the basic theory training, given to AIT and higher skill level training, as the requisite base for developing competent troubleshooters that can apply alternate troubleshooting procedures when primary test, measurement, and diagnostic equipment (TMDE) is nonfunctional.
- (2) That consideration be given to the addition of more armament technical expertise at the battalion level. The battalion currently has a 630 automotive warrant officer, but does not have a comparable armament capability.
  - c. Proponent for action. USAOC&S.
- d. Followup status. Troubleshooting principles were taught in all AIT courses. Additionally, eight more troubleshooting skills have been added to Level 2 primary technical courses with futher skill level training in Level 3 BTC courses.

# OBSERVATION: 82-56 SOURCE: USAOC&S

The MTOE of the nondivisional maintenance battalion has a headquarters and headquarters detachment (HHD) that does not provide personnel for maintenance of headquarters equipment or a mess capability. The lack of organic mess and adequate maintenance personnel in the detachment detracts from the battalion's capability to setup and operate in the field.

- a. <u>Discussion</u>. Although the current MTOE for the battalion HHD may be sufficient for garrison operations, the lack of an organic detachment mess and of maintenance personnel hinders mission accomplishment in the field. This is especially true when the individual companies of the battalion are required to operate at substantial distances from the battalion headquarters. The MTOE should be changed to reflect a battalion headquarters and headquarters company (HHC) with organic mess and maintenance capability.
- b. Recommendation. That the USALOGC review the MTOE of the HHD, nondivisional maintenance battalion, for feasibility of change to an HHC with organic mess and maintenance capability.
  - c. Proponent for action. USALOGC.
- d. Followup status. TOE 29-136H-3 is scheduled for review by USAOC & S during FY 84. The requirements for organic mess and maintenance will be reassessed at that time.

# OBSERVATION: 82-57 SOURCE: USAOC&S

Doubts exists as to the capability of CSS units to carry the number of lines in PLL and ASL for the many new weapon systems being fielded.

- a. <u>Discussion</u>. Current procedures and doctrine for establishing PLL and ASL may produce more lines of high-dollar items than units can effectively move and, more importantly, manage.
- b. Recommendation. That the combat PLL/ASL study currently underway by DARCOM/USALOG be expedited and implemented in the Division 86 NOTT.
  - c. Proponent for action. USALOGC.
  - d. Followup status.
- (1) PLL mobility. USAQMS is presently developing a requirements document for a PLL transporter that will accommodate a combat PLL of up to approximately 400 lines, 7,000 pounds, or 550 cubic feet. This will accommodate any of the mandatory parts lists thus far developed and staffed as well as demand~supported essential stocks for the same type of unit.
- (2) ASL mobility. This Directorate is presently updating the ASL Mobility Study (March 1978) so that it will accommodate the larger combat ASLs generated as a result of the Standardized Combat PLL/ASL program and Force Modernization. Size, cost, weight, and cube figures for the pilot Standardized Combat ASL were received on 22 February 83. Based on these figures and vehicle capacities, vehicular and personnel requirements will be developed.

OBSERVATION: 82-58 SOURCE: USAQMS

Personnel of the 200th TAMMC expressed concern about future SAILS training in USAREUR.

- a. <u>Discussion</u>. Personnel of the Army Logistics Management Center (ALMC) present an annual 76-hour block of instruction for selected personnel in USAREUR. Effective the fourth quarter of 1983, USALOGC has directed the SAILS training mission be transferred to the USAQMS.
- b. Recommendation. That USAQMS, with the support of USALOGC, obtain adequate resources from TRADOC and continue providing USAREUR with onsite SAILS training.
  - c. Proponent for action. USAQMS.
- d. Followup status. The transfer of the SAILS training function from ALMC to the USAQMS is currently being staffed by DA DCSLOG and TRADOC. On 4 February 1983, the USAQMS requested resources to assume the ALMC SAILS training mission. USAREUR will be advised regarding onsite training when DA and TRADOC finalize the transfer arrangements.

SOURCE: USAQMS

OBSERVATION: 82-59

Additional training in USAREUR for CMF 76 is required.

- a. <u>Discussion</u>. Logistics commanders expressed concern about the large number of soldiers being reclassified into CMF 76 without formal training. The Commander, 3d SUPCOM, indicated that training of his reclassified soldiers is one of his top priority missions. The USAQMS desires to establish a quartermaster school (forward) at Vilseck, Germany which should improve quartermaster training in USAREUR. The VII Corps G4 indicated that a large percentage of USAREUR logistics school quotas are not used because of the critical shortage of senior NCOs. CSS commanders cannot spare their personnel for training because of the day-to-day customer support mission.
- b. Recommendation. That USAQMS coordinate with DCSLOG, USAREUR, to establish a quartermaster school (forward) in USAREUR.
  - c. Proponent for action. USAQMS.
- d. Followup status. Establishment of a quartermaster school (Forward) in USAREUR would improve quartermaster-related training. Previous coordination with DCSLOG, USAREUR, resulted in a nonconcurrence of such a plan because of base support and stationing limitations at Vilseck. The school is forwarding a message to the DCST, USAREUR and DCSLOG, USAREUR, requesting reexamination of the issue.

# OBSERVATION: 82-60 SOURCE: USAQMS

Troop Issue Support Activity (TISA) supply personnel need additional training in accounting procedures.

- a. <u>Discussion</u>. According to logistics unit commanders, the training of TISA supervisors has improved since the last AC/DC visit; however, the supply clerks are weak in the area of subsistence accounting procedures. The critical tasks that require additional emphasis were identified.
- b. Recommendation. That USAQMS review current 76X courses and place additional emphasis on TISA accounting procedures.
  - c. Proponent for action. USAQMS.
- d. Followup status. The MOS 76X Basic Technical Course, scheduled for implementation in FY 84, will provide the additional emphasis needed.

### SOURCE: USAQMS

### OBSERVATION: 82-61

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Training of the equipment records and repair parts specialist remains a concern within USAREUR.

- a. <u>Discussion</u>. Logistics commanders stated that the PLL clerks require additional training, although no specific critical task deficiencies could be identified. At the request of the ADCSLOG, USAREUR, a PLL certification test has been developed and was delivered on 22 September 1982. The DISCOM commander, 3d Inf Div; G4, VII Corps; and Commander, 800th MMC, agreed to assist the USAQMS by identifying, by MOS and critical task, those areas that require additional training.
- b. Recommendation. That USAQMS review USAREUR survey results and provide additional training where critical task deficiencies exist.
  - c. Proponent for action. USAQMS.
- d. Followup status. A PLL certification test was developed and delivered to the ADCSLOG, USAREUR, in September 1982. On receipt of the USAREUR survey, the USAQMS will review and identify equipment records and parts specialist (MOS 76C) critical tasks and areas that may require additional training.

## OBSERVATION: 82-62 SOURCE: USASIGS

An interface device is required so that the tactical common user switched system has the capability to integrate all available fixed military— and host-nation indigenous communications systems.

- a. <u>Discussion</u>. A modulation demodulation (MODEM) device with a communications security capability needs to be developed so that local national circuits can be used by US forces to supplement military networks. Current fabricated wire-line adapters have a voice capability only. This new COMSEC-MODEM needs the following capabilities:
  - o Voice, data, or facsimile.
  - o 2 wire/4 wire full duplex.
  - o 3.2 kHz, 16/32 Kbs.
  - o Call-by-call operation.
  - o Acoustically coupled.
- b. Recommendation. That the SIGCEN write and staff the appropriate requirements documentation. Standard technical interface parameters should be provided to the other schools and centers by the SIGCEN to use when developing terminal devices to be used on local national communications systems.
  - c. Proponent for action. USASIGS.
- d. Followup status: MACOMS and TRADOC Schools have been queried by message as to specific requirments for wireline security. Readily available alternatives and long range options were presented, and responses were solicited to be provided this HQ NLT 28 Feb 83. Requirements documentation will be prepared and alternatives evaluated following a review of the user community response.

### OBSERVATION: 82-63 SOURCE: USASIGS

Signal units have a problem interfacing AN/TTC-41 and AN/TTC-35 switchboards with the AN/TTC-38 Tactical Automatic Switch System (TASS).

- a. <u>Discussion</u>. Interconnection of the AN/TTC-38 Tactical Automatic Switching System with AN/TTC-41 and AN/TTC-35 switches is required to extend common-user circuits to division and corps subscribers. During exercises over the past year, problems have been encountered in establishing the actual interface between the TASS switch and tributary switches and in troubleshooting subsequent system problems. The lack of operator and supervisor training on switch interfaces was identified as a contributing factor.
- b. Recommendation. That the SIGCEN research possible methods of introducing resident training on tactical switch interfaces and producing of exportable materials to support interface training in units.
  - c. Proponent for action. USASIGS.
- d. Followup status. 621-F1 provides 52 hours of operator training on SB-3614 and AN/TTC-41 interfacing problems. Training in 1 above will be increased to 70 hours of operator training with implementation of MOS 36M Course. Module III of TRI-TAC Systems Planners Course will include training on programming and interfacing the AN/TTC-41 (SB-3614) with present and future TRI-TAC equipments. ANCOC provides 44 hours on establishing and operating an automatic switch using patch worksheet, telephone traffic diagram, unit SOP and CEOI. 31Z ASI A7 (580-F3) provides 73 hours of instruction on the installation and operation of the AN/TTC-38 tactical automatic switch. AN/TTC-35 is considered obsolete for resident training as it is being phased out of active Army.

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Division 86 TOE issues involving C-E equipment, operator, and maintenance personnel bear further review.

### a. Discussion. The following Division 86 issues were raised:

- (1) At Division level, the operational capability has been increased, but the maintenance support organization has been reduced. Either the support element must be appropriately increased or the operational capability must be reduced so that system reliability can be better assured. The reduction of COMSEC equipment maintenance personnel is also a major concern. In addition, dedicated technical supply people are needed in the signal battalion maintenance section to deal with the increasing complexity of the maintenance supply system. It has also been suggested that an issue and receive clerk be included in the TOE.
- (2) The Div 86 TOE calls for 3-KW generators to operate signal equipment. Comments from the field suggest that a 5-KW generator would be more appropriate a 5-KW generator would allow a single generator set to power more than one signal system, reduce fuel consumption, and enhance generator availability.
- b. Recommendation. That the SIGCEN review and evaluate field concerns with the Division 86 signal battalion TOE.

### c. Proponent for action. USASIGS.

d. Followup status. Present policy provides for personnel authorization IAW AR 570-2, by Manpower Authorization Criteria (MACRIT). Any deviations from published criteria or standard must be fully justified by the proponent when processing TOE/MTOE's.

The principles of the COMSEC Log Review were implemented in the reorganization of the Division Signal Battalion for Division 86. The Battalion retained only enough COMSEC maintenance personnel to support its organic equipment. The remaining spaces were transferred to the DISCOM. This action will not degrade the Signal Battalion's capability to maintain its own COMSEC equipment.

A request for one Equipment Records Clerk and one Repair Parts Clerk added to TOE 11035J200 was sent to HQTRADOC on 14 Jan 83.

The replacement of 3 KW Generators with 5 KW Generators (PU-625 vs PU-620) is not the solution. There are no more available 5 KW Generators, no ongoing acquisition, and no ongoing production. The Army is already 4000 generators short for current 5 KW requirements. To change TO&E's would only aggravate a serious problem. For 5 KW Generators (PU-620) used with multichannel systems (AM/TRC-145, AN/TRC-113), there is the problem of where to carry the antennas and fuel pod that is built in on the 3 KW (PU-625). To place them on 5 KW (PU-620) as has been done in Europe, creates trailer

overload with a decrease in mobility and safety hazards from trailers being unstable. 3 KW's are currently undergoing PIP to improve reliability. A 3 KW high speed diesel as a replacement to the current 3 KW gasoline generator is currently being examined.

OBSERVATION: 82-65

Field units are placing increased emphasis on user-operated, reader-to-writer communications systems (e.g., facsimile and tactical computer systems) and less emphasis on traditional "hard copy" teletype systems.

- a. Discussion. At both corps and division levels, increased use is being made of leased facsimile equipment and computer systems to pass information quickly from writer to reader. The reliance on these systems is causing a matching decrease in the use of message traffic routed through traditional communications centers. This shift is causing field commanders to question the need for communications centers as they now exist at the division level.
- b. Recommendation. That the SIGCEN in conjunction with user activities, review and evaluate the need for communications centers at division level.
  - c. Proponent for action. USASIGS.
- d. <u>Followup status</u>. The Signal Center has unofficially solicited input on the future of record traffic in the corps and division areas from the corps and division commanders. The user's responses have been reviewed and the Signal Center has developed a new concept for record traffic. This new concept is summarized below:
- 1. Facsimile devices are provided to subscribers from the battalion level through the corps.
- 2. Personnal microcomputer terminals are authorized for selective subscribers from the brigade echelon through the corps.
- 3. Refile facilities are provided at each Corps Area Signal Battalion.
- 4. Message switches are located at the Division CEWI Battalion, Corps CEWI Group and each Corps Area Signal Battalion.
- 5. Record traffic messages between subscribers within the corps will be transmitted via facsimilie or microcomputer terminal through the circuit switching system. Messages from outside the corps destined for corps subscribers will be sent through a message switch to a refile facility. The refile facility will then send the message to the appropriate subscriber through the circuit switching system using either a facsimile or microcomputer terminal. Messages from corps subscriber through the circuit switching system using either a facsimile or microcomputer terminal. Messages from corps subscribers destined for outside the corps will be sent tothe refile facility. If the message is received via facsimile then the refile facility operator will prepare the message on a microcomputer

terminal and send it through the message switch for ultimate delivery outside the corps. If the message is received via microcomputer terminal then the refile facility operator will send the message through the message switch for ultimate delivery outside the corps.

Signal officers in artillery units where TACFIRE has been deployed are having difficulty identifying and troubleshooting communications system interface problems.

- a. <u>Discussion</u>. Currently, Signal officers and communications chiefs in units receiving TACFIRE attend the first 2 weeks of the TACFIRE transition course at Grafenwoehr and receive follow-on training from the CECOM new equipment training team. A 4-hour TACFIRE orientation is also included in the C-E Staff Officer Course at Fort Sill. However, signal officers have noted a need for more detailed training on TACFIRE communications to include the isolation of C-E problems, the TACFIRE authentication system, and other unique elements of the system. Signal personnel must be able to work effectively with artillery personnel in rapidly determining whether the problem is with the TACFIRE computer center or with the communications link.
- b. Recommendation. That the SIGCEN and USAFAS in conjunction with USAREUR C-E, review the need for expanding resident training on TACFIRE communications and for preparing a TACFIRE training circular.
  - c. Proponent for action. USASIGS.

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d. <u>Followup status</u>. There is no formal course of instruction structured to the Signal officers needs in addressing communication problems with TACFIRE.

CESOC provides only 2.5 hours of TACFIRE class time presented by the Weapons Department, Field Artillery School. Shortage of available equipment at Fort Sill precludes signal officers from hands-on time with TACFIRE.

Conservation with CPT McKinnon of the Tactical Combined Arms Department, Field Artillery School (AV 639-6385) suggests that the instruction mentioned in paragraph 2 above is of little benefit to an inexperienced Signal officer. CPT McKinnon suggests that a course of instruction oriented toward the Signal officer, covering such topics as Organizational Maintenance; Troubleshooting the system; Maintenance Tests Performed on the Computer Patchboard; Establishing Communications; Operating in a Degraded Mode; and Subscriber Tables would be beneficial. However, this would probably require several weeks, and there already exists a shortage of personnel and equipment to work with the courses presently in progress.

We propose to continue investigation through the USASC Liaison Officer Europe, Grafenwoehr; and Fort Sill to identify TACFIRE problems that are Signal related and recommend a solution at a later date.

OBSERVATION: 82-67 SOURCE: USASIGS

Signal units need new training methods that can help overcome time, funding, fuel, and exercise-area constraints.

- a. <u>Discussion</u>. Signal soldiers require frequent training to integrate individual transmission, carrier, crypto, switching, and technical control equipment into a communication network. Constraints on time, fuel, funds, and available training areas often act to restrict training on full systems. Additionally, training on actual equipment contributes to its deterioration and limits the ability to inject specific system faults.
- b. Recommendation. That the SIGCEN pursue the development of exportable equipment simulators, possibly capable of direct tie-in to the existing Reactive Electronic Equipment Simulator (REES) computer at Fort Gordon by a direct communications link. This would enable field units to satellite off an expensive facility already in existence.
  - Proponent for action. USASIGS.
- d. Followup status. The Signal Center is developing the idea of a "portable" Reactive Electronic Equipment Simulator (REES). Systems diagrams, plans, and estimated costs have been furnished. When this simulator is completed, it will be capable of providing training to field units.

Exportable, self-paced training packages are needed to teach typing skills to operators and maintenance personnel who must interact with computer keyboards.

- a. <u>Discussion</u>. It is projected that the technical controllers (32D) and satellite ground station equipment repairers (26Y) at one large fixed-plant communications facility will have to interface with 50 different typing keyboards once the station is upgraded. Typing is not part of the training for these MOSs at the USASIGS, and there is not time to add it to these lengthy courses.
- b. Recommendation. That the SIGCEN, in conjunction with the USASSC, investigate exportable, typing training aids with electronic keyboard simulators.
  - c. Proponent for action. USASIGS.
- d. <u>Followup status</u>. Satellite communications personnel 32D and 26Y are required to use TTY keyboards for order wire purposes only. They do not process heavy message traffic, but use the keyboards to coordinate with other locations. Some facilities not require large numbers of TTY machines, this will soon be corrected by the introduction of a single Smart Multi-Circuit Terminal (SMCT).

DCS Ops: Code-B440 was queried about the need for TTY keyboard training for these personnel, and stated he did not feel formal training was necessary. Experience has shown that personnel acquire the needed keyboard skills within a very short period of time on the job.

Anyone who feels a personnal need for this type training can attend the learning center. A device called the TAUT-2000, which is used with the Beesler-Que-See to teach typing is available in most learning centers. Three different TTY typing tapes used with Beesler-Que-See are available for purchase from Training Associates, Inc., Route #1, Box 447, Stanarsville, VA 22973. The three tapes are: Basic English Typing, English Teletype, Three-Row, and Typing Introduction for AN/UGC-74.

OBSERVATION: 82-69 SOURCE: USATSCH

Heavy equipment transporter (HET) companies are required to escort vehicles but have serious limitations in terms of escort vehicle and personnel.

- a. <u>Discussion</u>. If a HET company is operated by platoon element, sufficient personnel and vehicles are available for escort and convoy control. However, a HET company often dispatches vehicles in small groups and can run out of escort vehicles and personnel when heavily committed.
- b. Recommendation. That the TOE proponent examine the need for additional escort vehicles and personnel for the HET company.
  - c. Proponent for action. CACDA.

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d. Followup status. Pending resolution.

NOTE: This issue is unresolved and should be addressed in future reports.

OBSERVATION: 82-70 SOURCE: USATSCH

Calibration and test (TMDE) equipment does not keep pace with new systems.

- a. <u>Discussion</u>. There appears to be a lag in the fielding of calibration and test equipment that may be currently available but not classified as military standard. For example, a Test Set, Pressure (used for altimeter testing) has a NATO stock number (4920 12 167 0927) but cannot be ordered by the 349th Trans Bn (AVIM).
- b. Recommendation. That type classification of calibration and test equipment be expedited. Consideration should be given to satisfying current requirements with local purchase authority.
  - c. Proponent for action. USALOGC.
  - d. Followup status. Pending resolution.

NOTE: This issue is unresolved and should be addressed in future reports.

# PART FOUR: RECAPITULATION OF OBSERVATIONS.

OBSERVATION	STATUS	PROPONENT
82-1	Closed	
82-2	Closed	
82-3	Closed	
82-4	Closed	
82-5	Closed	
82-6	Closed	
82-7	Closed	
82-8	Closed	
82-9	Closed	
82-10	Closed	
82-11	Closed	
82-12	Closed	
82-13	Closed	
82-14	Closed	
82-15	Closed	
82-16	Closed	
82-17	Closed	
82-18	Closed	
82-19	Closed	
82-20	Closed	
82-21	Closed	
82-22	Closed	
82-23	Closed	
82-24	0pen	USAADS
82-25	Closed	
82-26	Closed	
82-27	Closed	
82-28	Closed	
82-29	Closed	
82-30	Closed	
82-31	Closed	
82-32	Closed	
82-33	Closed	
82-34 82-35	Closed Closed	
82-36	Closed	
82 <b>-</b> 37	Closed Closed	
82-38 82-39	Closed	
82-40	Closed	
82-41	Closed	
82-42	Closed	
82 <b>-</b> 43	Closed	
82-43 82-44	Closed	
02-44	Crosed	

82-45	Closed	
82-46	Closed	
82-47	Closed	
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82-50	Closed	
82-51	Closed	
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82-54	Closed	
82-55	Closed	
82-56	Closed	
82-57	Closed	
82-58	Closed	
82-59	Closed	
82-60	Closed	
82-61	Closed	
82-62	Closed	
82-63	Closed	
82-64	Closed	
82-65	Closed	
82-66	Closed	
82-67	Closed	
82-68	Closed	
82-69	Open	USA CACDA
82-70	Open	USALOGC

# PART FIVE: DISTRIBUTION

# ARMY STAFF

DAMP-TRF (2), DAMO-ODE (2), DAMO-ZO (2), DAMO-SSM (2), DAMO-SSW (2), DAMO-C4C (2), DALO-PLO (2), DAEN-CWO-E (2), DAAG-PLM-P (2), DASG-HCO (2), DAAR-OTR (2), DAPE-PSC (2), DAMI-ISI (2), DAMO-ODO (2), DAMA-PPM-P (2), NGB-ARO-T (2), DAMO-RQS (5), WASH DC 20310

# MACOM and DA Agencies

CINCUSAREUR	AEAGC-EX (5) AEAGC-TRADOC (5)	APO New York 09403
	AEAGC-ATC (5)	
USCINCRED	J5, RCJ5-E (10)	Mac Dill AFB, FL 33068
CINCPAC	J3 (5)	Camp H.M. Smith,
	IG (5)	Hawaii 96861
CDR FORSCOM	AFOP-OCJ (5)	Ft McPherson, GA 30330
CDR USAAHS	HSOP-SO (5)	Ft Sam Houston, TX 78234
CDR INSCOM	IAOPS-PL (5)	Arlington Hall Station, VA 22212
CDR TRADOC	ATCS-P (25)	Ft Monroe, VA 23651
CDR WESTCOM	APOP-SP-M (5)	Ft Shafter, HI 96858
CDR USACC	CC-OPS-OI (5)	Ft Huachuca, AZ 85613
CDR USAEIGHT	CJ-ED (5)	APO San Francisco 96301
CDR DARCOM	DRCRE-PM (5)	5001 Eisenhower Avenue,
		Alexandria, VA 22333
CDR MILPERCEN	DAPC-MOC (5)	200 Stovall Street,
		Alexandria, VA 22332
CDR MTMC	MT-PLO (5)	WASH DC 20315
CDR RCPAC	AGUZ-RO (5)	9700 Page Blvd,
		St Louis, MO 63132
CDR TRADOC COMB ARMS	ATCT-BA-SPS (5)	Fort Hood, TX 76544
TEST ACTV		•
CDR USACIDC	CIPP-TS (5)	5611 Columbia Pike,
		Falls Church, VA 22041
CDR USACSC	ACSC-POP (5)	Ft Belvoir, VA 22060
CDR USACE	DAEN-CWO-E (5)	Pulaski Bldg, WASH DC 20314
CDR USAAVC	MOAV-MO (5)	Rm 5A462, Pentagon,
		WASH DC 20310
CDR MDW	ANOPS-OP (5)	Bldg 46, Ft McNair,
		WASH DC 20319
CDR USARJ	AJGC-OT (5)	APO San Francisco 96343
CDR USAFAC	FINCA-I (5)	Bldg #1, Ft Benjamin Harrison,
		IN 46249
CDR USALEA	DALO-LEP (5)	New Cumberland Army Depot,
		New Cumberland, PA 17070
CDR MEPCOM	MEACRM-FM (5)	Ft Sheridan, IL 60037
	·	<b>,</b>

# UNIT

CDR USATHIRD	AFRD-DTO (5)	Ft McPherson, GA 30330
CDR 1931B	AFZU-DPT-FM (5)	Ft Clayton, PN, APO Miami 34004
CDR I CORPS	G3 (5)	Ft Lewis, WA 98433
CDR III CORPS	G3 (5)	Ft Hood, TX 76544
CDR V CORPS	G3 (5)	APO New York 09079
CDR VII CORPS	G3 (5)	APO New York 09107
CDR VII CORPS CDR XVIII ABN CORPS	AFZA-DPT-EX (5)	Ft Bragg, NC 28307
CDR 1ST ARM DIV	G3 (5)	APO New York 09326
CDR 2D ARM DIV CDR 3D ARM DIV	G3 (5)	Ft Hood, TX 76544
CDR 3D ARM DIV	G3 (5)	APO New York 09039
CDR 1ST INF DIV	G3 (5)	Ft Riley, KS 66442 APO San Francisco 96224
CDR 2D INF DIV	G3 (5)	APO San Francisco 96224
CDR 3D INF DIV	G3 (5)	APO New York 09036
CDR 4TH INF DIV	G3 (5)	Ft Carson, CO 80913
CDR 5TH INF DIV		
CDR 7TH INF DIV	G3 (5)	Ft Ord, CA 93941
CDR 8TH INF DIV	G3 (5)	APO New York 09111
CDR 9TH INF DIV	G3 (5)	Ft Lewis, WA 98433
CDR 24TH INF DIV	G3 (5)	Ft Stewart, GA 31313
CDR 25TH INF DIV	G3 (5)	Schofield Barracks, HI 96857
CDR 1ST AIR CAV DIV	G3 (5)	Ft Hood, TX 76544
CDR 82D ABN DIV	G3 (5)	Ft Bragg, NC 28307
CDR 101ST ABN DIV	G3 (5)	Ft Campbell, KY 42223

# CENTERS AND SCHOOLS

CMDT USAWC	AWCM (10)	Carlisle Barracks, PA 17013
CDR USACAC	ATZL-SWU-E (100)	Ft Leavenworth, KS 66027
opk obligito	ATZL-CAD-AC (50)	•
CDR USALOGC	4 >	Ft Lee, VA 23801
	ATZI-DCD-CD (25)	
CDR USASSC		
CMDT USAENS	ATZA-DTL (25)	
CMDT USAIS	ATSH-B-TD (25)	Ft Benning, GA 31905
CMDT USAADS	ATZC-P-O-TA (25)	Ft Bliss, TX 79916
CMDT USATRANS	ATSP-DT-DL (25)	Ft Eustis, VA 23604
CMDT USASIGS	ATZH-DTO (25)	Ft Gordon, GA 30905
CMDT USAARMS	ATZK-CSD-D (25)	
CMDT USAQMS	ATSM-TD (25)	Ft Lee, VA 23801
CMDT USAMPS	ATSM-MP-C (25)	Ft McCLellan, AL 36205
CMDT USAAVNS	ATZQ-CS-0 (25)	Ft Rucker, AL 36362
CMDT USAFAS	ATSF-T-D (25)	Ft Sill, OK 73508
CMDT USACMLS	ATSN-CM-A (25)	Ft McClellan, AL 36205
CMDT USAIMA	ATSU-CDD-CSD (25)	Ft Bragg, NC 28307
CMDT USAICS	ATSI-TP-AD (25)	
CMDT USAISD		
CMDT USAOCS	ATSL-RM-P (25)	Aberdeen Prooving Grounds,
		MD 21005
CMDT USAMMCS	ATSK-CC (25)	Redstone Arsenal, AL 35897
	HSHA-TLD (25)	Ft Sam Houston, TX 78234
		•

# END

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